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THE IMPACT OF BART ON LOCAL TRANSIT SERVICE AND FINANCIAL POLICY

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The BART Impact Program is a comprehensive, policy-oriented study and evaluation of the impacts of the San Francisco Bay Area's new rapid transit system (BART).

The program is being conducted by the Metropolitan Transportation Commission, a nine-county regional agency established by state law in 1970.

The program is financed by the U. S. Department of Transportation, the U. S. Department of Housing and Urban Development, and the California Department of Transportation. Management of the Federally funded portion of the program is vested in the U. S. Department of Transportation.

The BART Impact Program covers the entire range of potential rapid transit impacts, including impacts on traffic flow, travel behavior, land use and urban development, the environment, the regional economy, social institutions and life styles, and public policy. The incidence of these impacts on population groups, local areas, and economic sectors will be measured and analyzed. Finally, the findings will be interpreted with regard to their implications for the planning of transportation and urban development in the Bay Area and other metropolitan areas.

BART IMPACT PROGRAM
PUBLIC POLICY PROJECT
THE IMPACT OF BART ON
LOCAL TRANSIT SERVICE AND FINANCIAL POLICY



SEPTEMBER 1977

WORKING PAPER
PREPARED FOR
U.S. DEPARTMENT OF TRANSPORTATION
AND
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

The preparation of this report has been financed in part through a grant from the U.S. Department of Transportation, Urban Mass Transportation Administration, under the Urban Mass Transportation Act of 1974, as amended.

NOTICE

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PREPARED BY BOOZ, ALLEN & HAMILTON Inc.

UNDER CONTRACT WITH THE METROPOLITAN TRANSPORTATION COMMISSION
FOR THE U.S. DEPARTMENT OF TRANSPORTATION
AND THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
UNDER CONTRACT DOT-OS-30176, TASK ORDER 8
SEPTEMBER, 1977



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1. Report No. DOT-BIP-WP-42-8-77	2. Government Accession No.	3. Acquisition Catalog No.	
4. Title and Subtitle THE IMPACT OF BART ON LOCAL TRANSIT SERVICE AND FINANCIAL POLICY		5. Report Date September, 1977	6. Performing Organization Code
		8. Performing Organization Report No. WP-42-8-77	
7. Author(s) Linda S. Graebner, Tom Higgins, Emory Curtis		10. Work Unit No. (TRIS) Task Order 8	
9. Performing Organization Name and Address BOOZ, ALLEN & HAMILTON, Inc. 555 California Street San Francisco, California 94104 Tom Higgins (sub-contractor) Curtis and Associates (Sub-contractor)		11. Contract or Grant No. DOT-OS-30176	
12. Sponsoring Agency Name and Address U.S. Department of Transportation U.S. Department of Housing and Urban Development Washington, D.C.		13. Type of Report and Period Covered WORKING PAPER	
		14. Sponsoring Agency Code	
15. Supplementary Notes Metropolitan Transportation Commission, Hotel Claremont, Berkeley, California 94705 is prime contractor for the BART Impact Program. Booz, Allen & Hamilton is subcontractor to the Metropolitan Transportation Commission for the Public Policy Project of the BART Impact Program.			
16. Abstract This Working Paper assesses the public policy impacts of BART on existing and planned local transit service and its financing in the three BART counties in the San Francisco Bay Area. Three specific policy areas were considered: (1) The impact of BART on changes in service, routes, fare, transfer and personnel policies of existing local transit operators; (2) the impact of BART on the creation of new local transit systems to provide feeder service to BART as well as local transit service; (3) the impact of BART on changes in State, regional or local policies for financing local transit service.			
17. Key Words Bay Area Rapid Transit System(BART) BART Impact Program, Rapid Transit Public Policy Impacts, Public Transit Local Transit Service, Transit Service Transit Financing, Transit Policies		18. Distribution Statement Document is available to the public through the National Technical Informa- tion Service, Springfield, Virginia 22151	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 104	22. Price





SAN FRANCISCO BAY REGION CENTRAL AREA

BART: The Bay Area Rapid Transit System

Length: The 71-mile system includes 20 miles of subway, 24 miles on elevated structures and 27 miles at ground level. The subway sections are in San Francisco, Berkeley, downtown Oakland, the Berkeley Hills Tunnel and the Transbay Tube.

Stations: The 34 stations include 13 elevated, 14 subway and 7 at ground level. They are spaced at an average distance of 2.1 miles: stations in the downtowns are less than one-half mile apart, while those in suburban areas are two to four miles apart. Parking lots at 23 stations have a total of 20,200 spaces. There is a fee (25 cents) at only one of the parking lots. BART and local agencies provide bus service to all stations.

Trains: Trains are from 3 to 10 cars long. Each car is 70 feet long and has 72 seats. Top speed in normal operations is 70 mph with an average speed of 38 mph including station stops. All trains stop at all stations on the route.

Automation: Trains are automatically controlled by the central computer at BART headquarters. A train operator on board each train can override automatic controls in an emergency.

Magnetically encoded tickets with values up to \$20 are issued by vending machines. Automated fare gates at each station compute the appropriate fare and deduct it from the ticket value.

Fares: Fares range from 25 cents to \$1.45, depending upon trip length. Discount fares are available to the physically handicapped, children 12 and under, and persons 65 and over.

Service: BART serves the counties of Alameda, Contra Costa and San Francisco, which have a combined population of 2.4 million. The system was opened in five stages, from September 1972 to September 1974. The last section to open was the Transbay Tube linking Oakland and the East Bay with San Francisco and the West Bay.

Routes are identified by the terminal stations: Daly City in the West Bay, Richmond, Concord and Fremont in the East Bay. Trains operate from 6:00 a.m. to midnight on weekdays, every 12 minutes during the daytime on three routes: Concord-Daly City, Fremont-Daly City, Richmond-Fremont. This results in 6-minute train frequencies in San Francisco, downtown Oakland and the Fremont line where routes converge. In the evening, trains are dispatched every 20 minutes on only the Richmond-Fremont and Concord-Daly City routes. Service is provided on Saturdays from 9 a.m. to midnight at 15-minute intervals. Future service will include a Richmond-Daly City route and Sunday service.* Trains will operate every six minutes on all routes during the peak periods of travel.

Patronage: Approximately 146,000 one-way trips are made each day. Approximately 200,000 daily one-way trips are anticipated under full service conditions.

Cost: BART construction and equipment cost \$1.6 billion, financed primarily from local funds: \$942 million from bonds being repaid by the property and sales taxes in three counties, \$176 million from toll revenues of transbay bridges, \$315 million from federal grants and \$186 million from interest earnings and other sources.

March 1978

*Sunday service began in July, 1978

SUMMARY AND FINDINGS

This Working Paper documents the public policy impacts of BART on existing and planned local transit service and its financing in the three BART counties in the San Francisco Bay Area. Study findings and conclusions of BART impacts are presented in three policy areas:

- . Changes in service, route, fare, transfer and personnel policies of existing local transit operators.
- . The creation of new local transit systems to provide feeder service to BART.
- . Changes in State, regional or local policies for financing local transit service.

1. THE IMPACT OF BART ON THE POLICIES OF EXISTING TRANSIT OPERATORS

Literature on public policy-making and bureaucratic negotiation processes suggested that BART would effect the provision of local transit service only incrementally. However, BART planners recognized the need for coordination with other local transit systems early in the planning process. In addition, a comprehensive plan for system coordination was encouraged by BART and sponsored by the Federal government in 1967.

Despite these early attempts to facilitate coordination, BART had relatively little impact on service policies of the two major existing transit operators in the BART District, AC (Alameda-Contra Costa County) Transit and MUNI (San Francisco Municipal Railway). A coordination plan (The Northern California Transit Demonstration Project) set forth extensive recommendations for the addition and reduction of routes and service levels to accommodate BART. Some proposed routes were added to provide feeder service but many planned reductions of routes paralleling BART were not implemented. The lack of implementation appears to stem from a lack of AC Transit and MUNI confidence in projections and recommendations presented in the comprehensive plan, public opposition to route reductions and lack of an effective forum for compromise between BART and other transit operators.

BART had only a minor impact on transit operator fare policy--BART played some role in AC Transit's decision to abandon its zone fare policy. More importantly, BART resulted in the first agreement by Bay Area transit operators on coordinated transfer policy. Both AC Transit and MUNI individually reached agreement with BART on interim transfer systems. But both systems are considered inadequate due to complexity or lack of coverage. New proposals are currently being discussed among operators.

BART wage and fringe benefits are among the highest of transit operators in the Bay Area. Despite the generous level of BART labor agreements, BART wages and fringe benefits appear to have no conclusive relationship to similar policies of AC Transit and MUNI.

2. THE IMPACT OF BART ON THE CREATION OF NEW LOCAL TRANSIT SYSTEMS

Experience in other rapid transit systems across the country suggested the provision of feeder transit service was generally not an important consideration in system planning. BART system planners, although recognizing the need for feeder bus service, were pessimistic about the ability of such services to compete with automobiles for to/from BART trips.

An analysis of two specific new local transit service proposals (Contra Costa County and Tri-City in Alameda County) and a general review of recent local transit service development throughout the State of California indicated that BART planning and development was not a sufficient reason for the creation of either feeder or local transit service in the BART counties. Although new transit systems were proposed in the BART counties and supported by BART, actual system development near BART appears more related to newly available Federal and State subsidies than to BART.

3. THE IMPACT OF BART ON TRANSIT FINANCING POLICY

Although BART was expected to support its operations through fare revenues, it now requires a permanent source of local public financing to maintain its operations. This unexpected public financial burden required additional financial resources for transit within the region.

In all, local transit operators (other than BART) most likely have fewer financial resources available than in the absence of BART. The BART financial deficits from 1966 onward

forced the State legislature to approve new revenue sources for transit in the Bay Area, although these sources would probably have been available to meet recognized needs of other operators eventually, even without BART. In addition, local transit operators would have been eligible for additional funds (Transportation Development Act and Federal Section 5) in BART's absence which are now allocated to BART.

BART requires significant continuing local tax revenue primarily to fund original system construction. Despite this burden, BART appeared to have little effect on the willingness of local public officials to fund transit service other than BART.

Literature on public policy-making suggested that BART would have little impact on transit financial policy without a major crisis or problem in planned system financing. The large deficits projected by BART in 1966 (about \$150 million for construction alone) presented the State legislature with just such a problem. A series of State legislative measures for BART funding from 1969 to the present included significant changes in transit finance policy as a means to exercise greater State and regional control.

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I. INTRODUCTION

1. THE BART IMPACT PROGRAM

The BART Impact Program (BIP) is a comprehensive, policy-oriented study and evaluation of the impacts of the new San Francisco Bay Area Rapid Transit (BART) system. The BIP covers the entire range of potential rapid transit impacts, with major projects covering impacts on traffic flow, travel behavior, land use and urban development, the environment, the regional economy, social institutions and life styles, and public policy. The incidence of these impacts on population groups, local areas, and economic sectors is being measured and analyzed.

2. THE PUBLIC POLICY PROJECT

The Public Policy Project can be viewed as a major integrating chapter in the overall BART Impact Program. Each BIP project measures and evaluates BART's impacts on a variety of social, economic, transportation and community factors. The Public Policy Project, in turn, measures not only the direct and indirect impact of BART on the political process but also how impacts measured and evaluated in other projects result in changes in the local policy-making process and outcomes and how public policy changes further impact BART.

More specifically, the Public Policy Project includes an examination of:

- . The political process and behavior that occurred locally (neighborhood, city-wide, region-wide) due to a given BART impact(s).
- . The public policy change or decision, if any, that resulted from this interaction between a BART impact or expected BART impact and the community, interest groups, public officials and the like.
- . The implications of these public policy impacts and all other BART impacts on local governmental policy decisions or lack of decisions.

This paper specifically assesses the relationship between the operation of BART and changes in existing and planned local transit service and its financing. This study included analysis of the following three areas:

- . An examination of possible changes in levels of service, routes and schedules, and fare, transfer and personnel policies by existing local transit systems.
- . The identification of new or proposed local transit systems which may have resulted from a community's desire to provide improved access to BART.
- . An evaluation of any changes in the financing of local transit service and the relationship of those changes to BART.

3. ORGANIZATION OF THIS PAPER

This Working Paper presents findings and conclusions regarding the impact of BART on existing and planned local transit service and financing in three areas. First, background information is included regarding the objectives and methodology used in this work element and a description of existing policies and BART expectations for local transit in the Bay Area. Second, the report presents findings in each of the three areas of study--existing local transit service, new and proposed transit service and transit financing. Finally, general conclusions and implications on local transit service and financing are presented.

II. OBJECTIVES AND METHODOLOGY

The development, financing and operation of BART produced a new alternative to travel in many Bay Area localities as well as a new tax burden on the region's property owners. The purpose of this study is to examine the impacts of BART on the policies of transit systems in existence at the time BART was built and of any new or proposed transit systems coming into existence since BART. Two areas of transit policy are of particular interest: transit services--including routing, fare, transfers and other service policies--and transit finance--including sources of revenue and expenditures.

1. THE OBJECTIVE OF THE STUDY IS TO ASSESS THE IMPACT OF BART ON LOCAL TRANSIT IN THREE BASIC POLICY AREAS

To assess the public policy impacts of BART on local transit in the Bay Area, the study team selected three policy areas where significant impacts might be expected. Within each area, specific research questions were posed as a basis for analysis. The policy areas and corresponding research questions studied were:

- . The impact of BART on existing transit operations in the BART counties.
 - Have local transit systems altered route and schedule policies as a result of BART?
 - Have local transit operators changed fare and transfer policies in response to BART?
 - Have BART's pay scales, work rules, equal employment program, and benefit package influenced corresponding policies for other operators?
- . The impact of BART on new or proposed transit services:
 - Have jurisdictions with little or no transit implemented new transit services to access BART?

- Has the planning and operation of BART in developing communities created an impetus for implementation of feeder or local city-wide transit service?
- . The impacts of BART on financing local transit operations:
 - Have existing transit operators experienced any reductions in local tax support over what would be expected without BART?
 - Has regional and State funding for local transit operations (other than BART) been reduced over what would be expected without BART?

The transit policies investigated in this study related to all levels of government:

- . Local transit operators (for existing service).
- . City and county governments (for new service).
- . State, regional and local governments (for financing policies).

Analysis focused specifically on the role of each of these levels of government in transit policy formulation, their interaction with BART and an assessment of the final outcomes of policy negotiations.

2. THE STUDY APPROACH INCLUDED A REVIEW OF DOCUMENTS AS WELL AS KEY INFORMANT INTERVIEWS

Written documentation describing policy decision processes and outcomes, where available, was the primary source of data for this study. Types of documentation reviewed included:

- . Reports from other BART Impact Program projects.
- . Consultant and staff studies on transit coordination and financial policy.
- . State legislation and committee files.

- . Metropolitan Transportation Commission (MTC) policy statements, reports, meeting minutes, correspondence, and other files.
- . AC Transit, MUNI annual reports, studies, and correspondence.
- . Newspaper clippings, meeting minutes, public opinion and voter surveys.

Documentary evidence on BART impacts was used where possible because it described details of past events forgotten by the interviewees.

Key informant interviews were also important in developing study findings. Key informants included decision-makers as well as staff involved in BART-related transit decisions--from the State Legislature, MTC, transit operators, local governments, voters and members of community groups. These key informants were valuable in tracing the subtleties of the BART decision process, which are seldom found in the written documentation, and often provide the best evidence on the degree of BART impact. Evidence gathered through key informants was substantiated through other sources where possible. Conclusions were drawn with confidence in proportion to the quality and consistency of findings from interview and documentary sources.

Areas where BART impacts are reasonably well documented and consistent are:

- . Bus route and schedule changes to access BART and/or adjust to BART-induced travel patterns.
- . BART-related transfer and fare policies of existing transit operators.
- . General trends in pay scales, work rules, and equal employment programs of existing transit operators.
- . Number and type of transit systems developed since BART and connected to BART.
- . State and regional transit financial policies.

Areas where less confidence can be attributed to BART impact findings are:

- . Negotiations between BART and AC (Alameda-Contra Costa County) Transit and BART and MUNI (San Francisco Municipal Railway) on route and fare policy.

- . Specific, year by year trends in labor and pay policies for existing transit operators. (For example, union officials refused to be interviewed.)
- . Funding additional transit service from local funding sources (compared with a no-BART scenario).

3. A CASE STUDY APPROACH WAS USED TO HIGHLIGHT SPECIFIC EXAMPLES OF POLICY CHANGES AND RELATE THOSE TO BART

Determining the impact of BART on existing and new or proposed transit service required a detailed review of route and schedule data as well as a documentation of the policy decision process related to BART. To allow sufficient analytical detail, specific case studies were selected, two existing and two new or proposed systems. For new and proposed systems, case study systems were selected, where possible, to represent the successful and unsuccessful development of a new transit system. This was done to examine a variety of forces and outcomes at work in developing systems.

The following systems (or proposals) were chosen:

. Existing Systems

- AC Transit--the major East Bay carrier and an independent transit district within the two East Bay BART District counties, provides access to and parallels BART on a number of routes.
- MUNI--a major local system operated by the City/County of San Francisco provides access to BART and some parallel service.

. New or Proposed Systems

- The Fremont-Newark-Union City (Tri-City) proposal to fund local transit service in southern Alameda County under annexation to AC Transit; approved by the electorate in Fremont-Newark only in 1974.
- Central Contra Costa County Local Mass Transportation Agency (LMTA) proposal for local transit service which was defeated by the voters in 1974.

BART-related findings for each of these cases were compared and generalized conclusions developed.

4. THE NO-BART ALTERNATIVE

The No-BART Alternative (NBA) has been defined by the Metropolitan Transportation Commission as the transportation system judged most likely to have evolved in the central Bay Area by 1976 had the decision to build BART not been made in 1962. The purpose of the NBA is to provide a realistic estimate of the net effects of BART. A consistent definition of the NBA is being used by all of the projects in the BIP.

The NBA was defined by analyzing the political and financial environment in the Bay Area at the time of the decision to build BART and in the following years in order to determine the most likely components of the NBA. These components were further reviewed in the context of actual 1976 travel demand and 1971-76 trends in the BART corridors to ensure that the level of service provided by the NBA was plausible.

The NBA includes all freeways and principal local streets which existed in 1976, but no additional highway facilities. There are relatively minor changes in the operations of the major transit services in the central Bay Area from the actual 1971 pre-BART base to the hypothetical 1976 NBA: 1973 was found to be a peak year for provision of transit service by Greyhound (commuter buses from central Contra Costa County to downtown Oakland and San Francisco) and AC Transit's transbay commuter service. Those levels of service by those two carriers are retained in the NBA. In the NBA, small improvements in frequencies in the San Francisco MUNI's routes in the Mission corridor were made, but no new routes were introduced. The only capital cost associated with the NBA is the potential addition of 15 coaches for peak-hour service in San Francisco's Mission corridor.

Although use of the NBA as defined was not always appropriate for this project, some form of comparison was used in all cases as a means for isolating BART's role in public policy changes. Forms of comparison used included comparison of:

- . Present with pre-BART policy.
- . Actual public policy decisions with what documentation shows or decision-makers claim would have been in BART's absence.
- . The policies of communities served by BART with communities not served by BART.

Such comparisons are appropriate means for identifying and analyzing the policy impacts of BART for different issues in varying settings.

5. LITERATURE ON PUBLIC-POLICY MAKING PROCESSES AND RAPID RAIL TRANSIT POLICY IN PARTICULAR SUGGEST THAT BART SHOULD HAVE ONLY A MINOR IMPACT ON LOCAL TRANSIT POLICIES

The policy-making literature suggests that policy-making is an incremental process, results from issues and problems, not opportunities, and includes compromise in which actions are rarely decided on singular issues but in tandem with other issues.¹ Bureaucracies often strive to preserve their existing programs and ensure continued growth, responding the least to apparent opportunities, and the most to issues that threaten or impose on existing programs and policies.² New and emergent problems often displace other important issues as agencies and decision-makers try to allocate limited resources.³ BART was a new agency developing a new technology with uncertain results. BART was not empowered to subsume any other transit agency nor was it expected to compete directly with any other transit operator. Therefore, BART was not perceived as a threat to other transit operators and hypotheses about incremental decision-making are likely to apply.

This general literature on policy-making does not result in specific study hypotheses, but does suggest that:

- . Responses of existing transit operators to BART would include only gradual and incremental changes of a compromise nature rather than comprehensive plans.
- . Immediate responses by local jurisdictions solely to provide feeder service to BART are unlikely.
- . The State and MTC are unlikely to make dramatic changes in transit financing policy without a major crisis or problem in existing financing arrangements.

¹ See Geoffrey Vickers, The Art of Judgment: A Study of Policy Making (New York: Basic Books, 1965).

² The best analysis of this process where bureaucracies strive to preserve and enhance their budgets is Aaron Wildavsky, The Politics of the Budgetary Process (Waltham, Maryland: Little Brown & Co., 1964).

³ See, for example, Donald Schon, Beyond the Stable State: Public and Private Learning in a Changing Society (New York: W.W. Norton, 1971).

III. THE TRANSIT POLICY ENVIRONMENT

Changes in public policy in response to BART must be viewed in the context of the transit policy setting into which BART entered as well as the expectations of Bay Area citizens for the BART system.

This chapter provides an introduction to the three policy areas studied (existing transit service, new service and transit finance) including the existing transit policies and authorities during the initial development of BART and expectations of changes in transit policy due to BART.

1. BART COORDINATION WITH EXISTING TRANSIT OPERATORS BECAME AN IMPORTANT POLICY ISSUE TO ENSURE THE DEVELOPMENT OF A COMPREHENSIVE, INTEGRATED TRANSIT NETWORK

As early as 1962, transit planners were discussing a "comprehensive transit network," but the rapid rail component received more attention than existing or new bus systems. In the words of BART system planners, the "Bay Area needs a comprehensive, integrated transit network."¹ However, early planners appeared to view that integrated transit network as rapid transit coordinated with highway systems rather than with local transit systems. Access to BART by other forms of public transit was not an apparent concern in 1962. Original BART plans noted a 44% rise in auto traffic and a 15% decline in transit ridership over the period 1954 to 1959.² Transit usage was clearly on the decline. BART was intended to change this transit usage trend, but the upgrading of existing transit systems to connect with BART did not appear to be an explicit concern.

As more detailed system planning progressed, planners began to suggest a need for feeder service to BART, particularly at outlying station areas.³ Integration with existing operators was viewed as a necessary ingredient to achieving the objective of a comprehensive transit system. During the period 1964-67, the Bay Area Transportation Study Commission (BATSC) sponsored a federally funded transit study known as the "Northern California Transit Demonstration Project." The expressed purpose of this demonstration

¹Van Beuren Stanberry, The Economic Effects and Benefits of Bay Area Rapid Transit, April, 1962, p. 80.

²Ibid., p. 76.

³McDonald & Smart, Inc., A History of the Key Decisions in the Development of Bay Area Rapid Transit, August, 1975, p. 195.

project was to identify an appropriate configuration of transit service in the Bay Area as a result of BART. The recommendations of this initial coordination study were debated at length by AC Transit and MUNI. MTC coordinated an additional Federally funded BART coordination study for each operator during the period 1972-74.

2. THE DEVELOPMENT OF NEW TRANSIT SERVICE SPECIFICALLY AS FEEDERS FOR RAPID TRANSIT APPEARS UNLIKELY BASED ON THE EXPERIENCE OF OTHER RAIL OPERATORS IN THIS COUNTRY

Only in the last decade have rapid rail system planners given attention to either private or public transit to connect with rapid rail systems. One planner familiar with the history of U.S. rapid rail has said, "Prior to (about 1960), it was generally assumed that most potential patrons of rail rapid transit would reside within convenient walking distance of one half mile of stations."⁴ The Cleveland rapid rail additions in 1958 were perhaps the first to provide for any extensive kiss-ride or park-ride facilities in outlying areas. Even here, transit feeders did not receive much attention.

BART planners did consider transit connections to BART and expected significant to/from BART patronage on feeders. In outlying areas (Concord, Fremont), 15% of trips connecting to BART were expected to be by transit, with 37% for the overall system.⁵ Yet, as late as 1972, consultants examining possible transit systems in Contra Costa County, in part to serve BART, were pessimistic about conventional bus service being able to compete with autos on BART feeder trips.⁶

⁴ Henry Quinby, "Rapid Transit Feeder Systems," Proceedings, National Transportation Symposium, San Francisco, May, 1966.

⁵ Ibid.

⁶ James W. Schmidt, "Evaluation of Alternative Feeder and Local Transit Systems in Suburban Areas," Highway Research Record #417, 1972.

3. FEDERAL, STATE AND REGIONAL TRANSIT FINANCE POLICIES HAVE CHANGED TOWARD HIGHER PUBLIC SUBSIDIZATION SINCE THE ORIGINAL PLANNING FOR BART, ALTHOUGH BART WAS ORIGINALLY PLANNED TO OPERATE FROM FAREBOX REVENUES

Public sector financial support for transit has increased at a relatively high rate, compared with long-standing public programs such as education, welfare, public safety and even highways. Exhibit I depicts major Federal and State transit finance policy changes. As the exhibit shows, the start of these major shifts toward increasing subsidization coincides with initial BART system planning; however, no cause and effect relationship is apparent.

A summary of the current distribution of transit finance policy is as follows:⁷

- . The Federal government provides three major funds for financing transit capital, operating and planning expenditures. The Urban Mass Transportation Administration was authorized in 1964 to allocate limited funding for transit capital expenditures. Congress approved expanded capital and planning funding in 1970 and operating assistance in 1974.
- . Until recently, the State of California played almost no role in transit finance policy. The State's first major involvement was in 1959 with the allocation of bridge toll funds for construction of a BART subaqueous tube. Since then, the State Legislature has played a more active role in transit financing policy through passage of ¼¢ sales tax authorizations for various counties for transit, Transportation Development Act funding in 1971 (¼¢ local sales tax for transit), and transfer of some highway funds for fixed guideway transit under Proposition 5 in 1974.
- . The Metropolitan Transportation Commission (MTC) was created by the Legislature in 1970 and was given the authority to allocate Federal, State and regional funds to transit operators in the nine county Bay Area. In 1974, the Legislature transferred authority for setting bridge tolls in the Bay Area (except for the Golden Gate Bridge) from the California Toll Bridge Authority to MTC.

⁷ Bay Area Council, Financing Bay Area Transit, September, 1975, pp. 15-16.

EXHIBIT I
Public Policy Project
MAJOR CHANGES IN FEDERAL AND STATE
TRANSIT FINANCE POLICY¹

Policy Era	Policy	Implicit Rationale
1880	No public transit assistance.	Operating and capital expenses paid from farebox revenue.
1945	Local tax assistance for capital and operating costs.	Farebox revenue plus local tax assistance support transit capital and operating costs.
1959	\$120 million in State bridge toll revenues committed to finance BART tube; additional \$60 million pledged in 1961.	Transportation-related State revenue needed to fund extraordinary transit (BART in particular) capital costs.
1964	Federal capital assistance (UMTA created). Major UMTA funding authorized in 1970 (\$1 billion/year 1970-73).	Above sources can take care of all operating costs, but some capital costs require Federal aid.
1971	State removed sales tax exemption from gasoline to enable increased local tax assistance to transit (1971 California Transportation Development Act).	Above sources inadequate to fund all operating and capital costs without State programs to allow increased local aid.
1973	Portion of highway funds should be used to support transit capital costs (1973 Federal Highway Act, 1974 California Proposition 5). State Highway Departments renamed State <u>Transportation</u> Departments.	Existing resources unable to meet <u>capital</u> needs, thus highway funds needed to develop transit capabilities.
1974	First Federal operating assistance (1974 National Mass Transportation Assistance Act authorizes \$11.8 billion Federal transit aid over six years including \$3.9 billion in operating grants); low-fare and free-fare transit studies in Bay Area and nationally.	Existing resources unable to meet <u>operating</u> needs without Federal aid; de-emphasis of farebox revenue as transit finance resource.

¹SOURCE: Bay Area Council, Financing Bay Area Transit, September 1975, p. 10.

Still the largest percentage of governmental assistance for transit in the Bay Area comes from local tax assistance, specifically the property tax. Local operators still retain control over their operating budgets and financing policies. However, MTC's increasing authority for funding allocation provides increased leverage over local transit financial policies.

BART was expected to have little effect on transit finance policy. The original BART Financing Plan predicted that, when operational, BART would produce revenue in excess of expenditures, sufficient to finance all rolling stock and other required purchases.⁸ Therefore, financial policy-setting would remain at the regional level (BART) and no additional funding sources would be required. It was only after the start of operations in 1972 that BART realized its earlier financing predictions for systems operations were unrealistic and eventually required changes in State policy to provide financing for operations.

⁸ Parsons, Brinkerhoff, Tudor & Bechtel, The Engineering Plan for Bay Area Rapid Transit, April, 1962, p. 35.

IV. THE IMPACT OF BART ON EXISTING LOCAL TRANSIT SERVICE

BART planners viewed coordination with existing operators on service levels, routes, fares and transfers as an important objective to ensure the achievement of a comprehensive regional transportation system as well as enhance the viability of BART. The purpose of this chapter is to assess the impact of BART on service, fare, transfer and personnel policies of existing operators. Particular attention is paid to the coordination process used by BART and the two transit operators studied (AC Transit and MUNI) and its effect on the final outcome.

Two existing public transit operators within the BART counties were chosen for this analysis, while a major private provider was not included. The public operators are:

- . AC Transit--the major East Bay carrier and an independent public transit district, provides access to 20 BART stations and parallels BART on a number of routes.
- . MUNI--the major local system operated by the City/County of San Francisco, provides access to 9 BART stations and some parallel service.

Both of these operators were directly affected by BART operations. Greyhound, providing express bus service from Contra Costa County to San Francisco, was the operator most dramatically affected by BART service, losing about 70% of its trips to BART. Although Greyhound experienced substantial BART impacts, the fact that it has long desired to abandon most of its transit service, has applied to the State Public Utilities Commission to end its commute service and was never prominent in major transit coordination efforts, were reasons for not including Greyhound in this analysis.

Specific findings on BART's impact on existing transit operators were studied in three primary areas. Study findings in each area are summarized below.

(1) BART's Impact On Service Policy

Although comprehensive studies were conducted and numerous meetings held, few recommendations for major service and route changes to coordinate with BART were implemented by either AC Transit or MUNI. Proposed route additions and/or changes to provide feeder service to BART were generally implemented, whereas proposed reductions in routes or service levels paralleling

BART were generally not implemented. Certain characteristics of the coordination process were the primary cause for this outcome:

- . Results of comprehensive consulting studies were viewed with some skepticism by the operators who believed projections of BART patronage were overly optimistic.
- . At least one operator, MUNI, may have lacked adequate planning and management staff resources to develop or respond to route and service level plans.
- . The coordination process did not provide an effective forum for negotiation.
- . The public, press or outside interest groups generally did not provide pressure for system coordination. Rather, the public strongly opposed planned reductions in service parallel to BART where they believed BART would not serve them as well.
- . The wide divergence in positions between BART, AC Transit and MUNI on optimum routing policy.
- . No direct addressing of the revenue consequences of proposed route and service level changes to each operator sufficiently to get each operator's cooperation.

(2) BART's Impact On Fare And Transfer Policy

BART's only possible impact on MUNI or AC Transit fare policy was to play a minor role in AC Transit's decision to abandon its local fare policy.

BART did reach agreements with both operators on interim transfer systems about the time BART began operations. Transit managers viewed transfer policy as more dependent on other operators, whereas service policy was viewed as an independent decision of each operator.

Although transfer policies were agreed to with each operator, neither of the systems is viewed as satisfactory. Discussions among operators continue on possible new equipment or modifications to existing equipment to improve these "interim" systems.

(3) BART's Impact On Wage And Fringe Benefit Policy

A historical comparison of BART, AC Transit and MUNI wages and fringe benefits showed no noticeable impacts of BART policies on those of AC Transit and MUNI. However, managers at both AC Transit and MUNI acknowledge that BART wages, being higher than those of the other operators, are often used as a standard for comparison by union officials.

* * * * *

The remainder of this chapter is organized into four sections as follows:

- . A description of the organizational structure and decision-making environment of AC Transit and MUNI and major system coordination efforts.
- . An analysis of BART's impact on transit service policy (routes and schedules).
- . An analysis of BART's impact on fare and transfer policy.
- . An analysis of BART's impact on personnel policies (wages, fringe benefits, equal employment).

Within each section, general findings are presented, followed by specific findings for AC Transit and MUNI respectively.

1. THE ORGANIZATIONAL STRUCTURE OF BART DISTRICT TRANSIT OPERATORS AND COORDINATION EFFORTS PROVIDES IMPORTANT BACKGROUND TO OPERATOR INTERACTIONS WITH BART

BART, as a regional transit district, entered a region made up of generally local operators with a variety of organizational structures and constituencies. This section briefly describes the history, organizational structure and decision-making environment of AC Transit and MUNI, the two systems studied in this project. The section concludes with a brief description of coordination efforts between these systems and BART.

(1) AC Transit Was Formed As An Independent Public Transit District To Provide Local Service In Selected Areas Of The East Bay Counties Of Alameda And Contra Costa

AC Transit is a special-purpose transit district created in 1955 by the California Legislature and approved in 1956 at a special election of voters in the East Bay area. In 1958, the voters passed a \$16.9 million bond issue allowing AC to acquire the properties of the Key System (a private operator) at a time when confidence in the Key System was at a low point. In 1959, AC began operations and has increased its ridership and deficit with little evidence of taxpayer disapproval.¹

AC Transit began operations with about 45 million passengers in 1960, the last year of the Key System operation. AC provides local and express bus service in the East Bay as well as extensive service across the San Francisco-Oakland Bay Bridge to the transbay bus terminal on the edge of San Francisco. Total passengers increased to 52 million in 1970 and currently total about 61 million. Fares are 25¢ for local service in one zone and 60¢ to 85¢ for a transbay trip.

The District policy is established by a Board of Directors consisting of seven members elected by voters for four-year terms. Five of the seven Board members are elected in districts having approximately equal populations and two are elected at-large in the District.

¹For a brief history and interpretation of public opinion toward transit at this period, see Norman Kennedy, AC Transit: A Review of Ten Years of Public Ownership and Operation (University of California: Institute of Transportation and Traffic Engineering, 1971).

Exhibit II displays AC Transit's current organization structure. Three statutory officers--General Manager, District Attorney and District Secretary--are appointed by and report to the Board of Directors. The General Manager is responsible for overall district management and system operations. A total of eleven managers report directly to him.

The District was the first public transit agency in the nation to be given the power to levy a tax on real estate. The tax rate began at about 3¢ per \$100 of assessed valuation and is now in excess of 50¢.

(2) The Municipal Railway (MUNI) Has Been Operated By The City/County Of San Francisco Since 1909

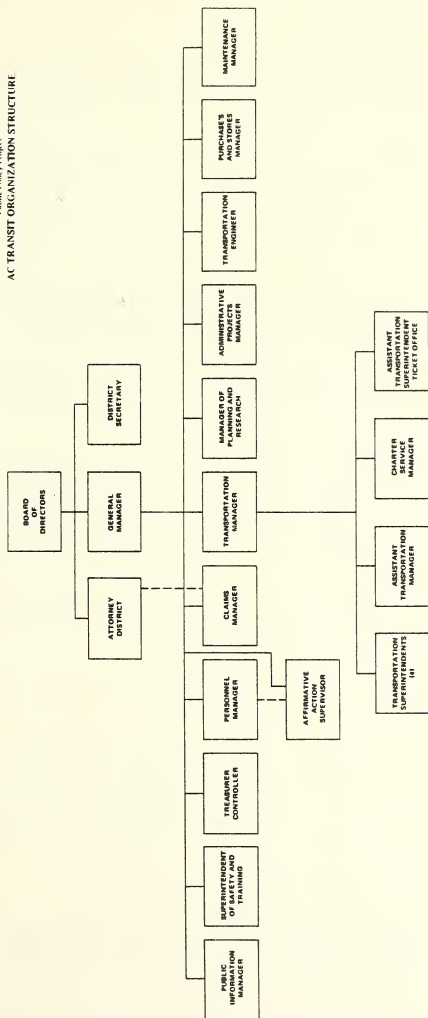
The present San Francisco Municipal Railway (MUNI) was first formed in 1909 when the City passed a bond issue to build an electric railway in Geary Street. Other transit lines, privately owned and operated, existed in the City at that time. During World War II (in 1944), MUNI took over all of the private lines and became the sole transit operator in the City, acquiring exclusive transit rights. BART was the first system to provide service in San Francisco since MUNI was organized in 1909.

MUNI serves an average daily ridership of almost 500,000 passengers (with 200,000 riders on passes or transfers) on 73 basic routes extending over 805 round trip miles. Currently, MUNI utilizes almost 15% of the San Francisco budget that is funded from ad valorem taxes. Ad valorem tax funding of MUNI totalled \$6.1 million in 1961 compared with \$17.9 million in 1972.

MUNI is one of three departments under the Public Utilities Commission (PUC) (the others are Hetch Hetchy Project and the Water Department and, until the late 1960's the San Francisco International Airport). Of the three departments in the PUC, the MUNI alone must utilize ad valorem taxes for operation (the others generating revenues in excess of expenditures). In fact, to ease MUNI's budgetary deficits, these departments contribute power, water and in-kind services totalling about \$6 million annually.

Because of its need for ad valorem support, MUNI must compete with other City agencies for General Fund revenues using a complex budgetary procedure. In all, the MUNI budget must be approved by the MUNI

EXHIBIT II
Public Policy Project
AC TRANSIT ORGANIZATION STRUCTURE



General Manager, Public Utilities Manager and Commission, Mayor and Board of Supervisors. Each can cut the budget; only the MUNI General Manager can add programs.

Exhibit III shows the current MUNI organization. The Personnel and Safety, Finance, Operations Analysis, Planning and Public Information functions do not report to the General Manager of MUNI but serve the PUC organization. Also, the two Deputy General Manager positions and the Transportation Planning functions under the PUC were only established in the early 1970's.

(3) A Number Of Formal Studies Were Initiated Hoping To Facilitate BART Coordination With AC Transit And MUNI On Service And Transfer Policy

Coordination between BART and existing transit operators was recognized as an important objective by BART system planners. A number of committees and structures were used to achieve coordination, as described in the following paragraphs.

In 1963, an informal joint committee was organized by the operating staffs of AC Transit and BART. Soon after, MUNI operating officials joined the sessions. By 1964, this group had developed a work program and had applied for Federal funding when it appeared the complexity of the issues warranted outside assistance.

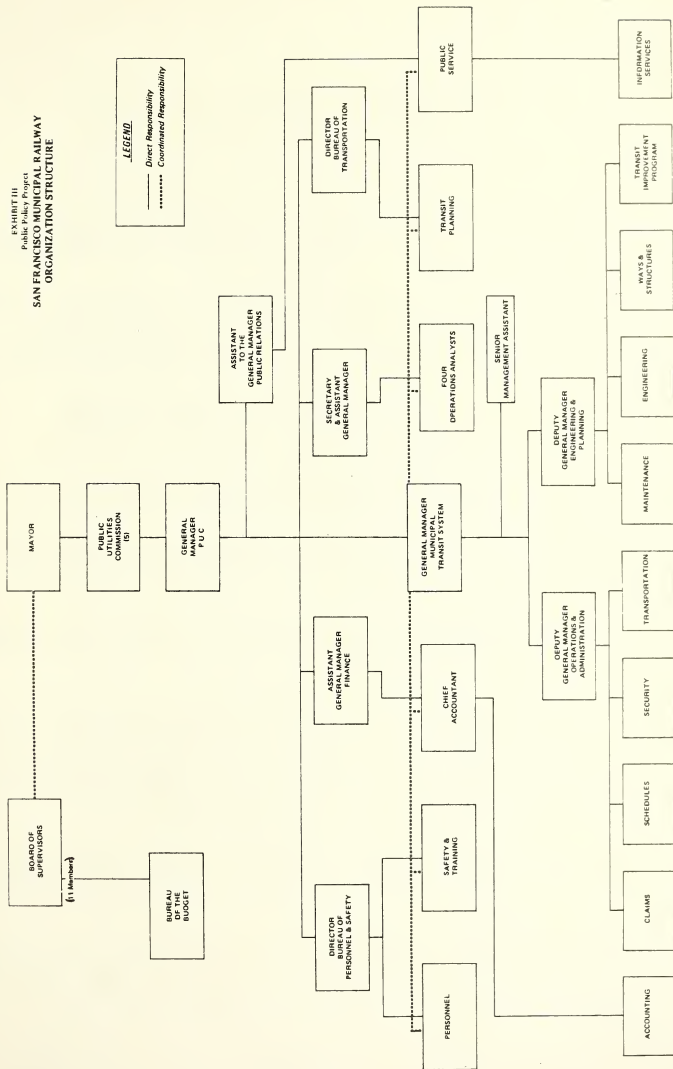
As a result of this proposal, the Northern California Transit Demonstration Project (NCTDP) was conducted from 1965 to 1967.²

The purpose of the study, as outlined in its final report, was to recommend solutions to two types of coordination problems:

- . Develop a system for interfacing existing surface transit networks with BART including such issues as feeder service, joint fares, collection and handling of fares, transfer, sharing of revenues or coordinated schedules.

² Simpson & Curtin, Coordinated Transit for the San Francisco Bay Area, Now to 1975, October, 1967.

EXHIBIT III
Public Policy Project
SAN FRANCISCO MUNICIPAL RAILWAY
ORGANIZATION STRUCTURE



- . Determine the impact of BART on the services, routes and revenues of existing transit operators and develop a means for retaining a balance of services.

This Federally funded project was completed by a consulting firm under the direction of a full time staff project director. Overall supervision was provided by a Board of Control including a representative each from BART, AC Transit and MUNI.

In 1967, the NCTDP recommended significant changes in AC Transit and MUNI service, routes and transfers to coordinate with BART. The lack of any significant implementation plan as late as 1972 led to two further Federally financed studies:

- . AC Transit/BART Service Coordination
Study conducted by Alan M. Voorhees & Associates in 1974.
- . MUNI/BART Coordination
Study conducted by DeLeuw, Cather & Company, Inc., in 1972.

Both studies received oversight from a Board of Control including representatives of the operator (AC or MUNI), BART and MTC.

2. BART COORDINATION EFFORTS HAD LITTLE IMPACT ON AC TRANSIT AND MUNI SERVICE POLICIES

The previous section described the variety of major studies and activities undertaken by BART, AC Transit and MUNI to provide a reasoned plan for transit service coordination. Despite recommendations suggesting the need for significant changes in service policy, few changes were implemented. This section analyzes both the outcome of BART/AC Transit and BART/MUNI interactions on service policy and the reasons for this outcome.

The political science literature³ suggests two specific factors which bear on outcomes of negotiation/coordination efforts like that required between BART and AC Transit or BART and MUNI:

³ Martin Meyerson, Edward C. Banfield, "Note on Conceptual Scheme," Politics, Planning and the Public Interest (New York: The Free Press, 1955). For a discussion of the factors involved in formulating a proposal for acceptance or passage by a set of actors, in this case legislative actors, see Eugene Bardach, The Skill Factor (Berkeley: University of California Press, 1972).

- . The positions, perceptions, skills and resources (information, experience, staff) of the decision-makers, as well as their vested authority.
- . The visibility and importance of the issue to attentive publics and potential allies of the decision-makers.

In both negotiation/coordination processes analyzed here, these factors explain the generally minor impact BART has had on local transit policy. In brief:

- . Managers of both transit operators (AC Transit and MUNI) were skeptical of analytical results presented by the NCTDP. Neither believed that actual BART ridership would be as high as projected and had little confidence in basing their own decision on such projections.
- . At least one operator (MUNI) appears not to have had a planning or other staff resource like BART at the time service recommendations were developed. Therefore, the development of counter-proposals and individual plans was delayed for lack of staff resources.
- . No real forum for negotiation was ever established. There were no incentives for bargaining and compromise in early coordination meetings between operators. No third party was available to play the role of mediator and provide some incentive for operators to reach some resolution of their differences (MTC did start to play this role later in the process after BART service had already begun).
- . No evident public constituency supported coordination attempts. Public groups were often vocal in opposition to most BART-related recommendations for reductions in local transit service, thereby increasing the difficulty of implementing such plans. Press coverage was generally non-committal and activity of outside interests was low or non-existent.

The following two sections describe BART negotiation outcomes with AC Transit and MUNI respectively on transit service policy and more specific reasons for those outcomes.

- (1) BART's Impact On AC Transit Service Policies
Has Been To Reduce Some Service, But Not Nearly
As Much As Planners Had Hoped

Exhibit IV shows BART-related changes made by AC Transit from 1972 through 1974. While a large number of lines were changed to connect with BART, only a few lines have been eliminated or had significant reductions in service. Line 30 has been eliminated, with reductions in service on three other lines: 31, 32 and 33. On transbay service, no lines have been eliminated completely, but the K, R and S lines, for example, have been reduced from five minute headways in 1973 to ten minute headways. Likewise, the A line ran at ten minute headways in 1973 (at peak) and was cut back to 20 minute headways in 1974 (at peak). C Line headways for the same period have increased from seven to eight minutes, E Line from ten to twelve minutes.

These changes in AC Transit service are substantially less than the modifications and abandonments on 30 of AC Transit's routes which were originally recommended in the NCTDP report of 1967. The following paragraphs suggest reasons for the disparity between originally recommended changes and the actual outcome.

AC Transit, unlike BART, appeared to have won the respect of public and opinion leaders in the Bay Area. For example:

- . A 1971-72 survey of 75 city council members and newspaper editors in Alameda, Contra Costa and San Francisco Counties found AC Transit's performance was considered very good to excellent by almost 75% of the respondents.⁴ This survey reflected opinion at a time when many AC-BART coordination issues were being seriously debated by the two agencies and widely reported in the press.⁵

⁴ Stephen Zwerling, Mass Transit and the Politics of Technology (New York, Praeger Publishers, 1974), p. 108.

⁵ A review of local newspaper clippings from 1967 to 1976 reveals the bulk of the coordination articles falling in the period 1969 to 1972.

EXHIBIT IV
Public Policy Project
CHRONOLOGICAL LISTING OF BART-RELATED CHANGES
IN AC TRANSIT BUS SERVICE

Line(s)	BART Station(s) Or Route Served	Change
<u>September 1972--BART Fremont Line Service</u>		
30	Hayward - Oakland	Service discontinued
32	Hayward - Oakland	Service reduced (public protest prevented discontinuation)
14, 32, 36	Lake Merritt	Rerouted to BART
N	San Leandro	Rerouted to BART
53	Fruitvale	Service increased and rerouted to BART
54, 64, 79	Fruitvale	Rerouted to BART
55	San Leandro	Rerouted to BART
56, 57	Coliseum	Rerouted to BART
90, 91, 91A, 92	Hayward	Rerouted to BART
91, 82	South Hayward	Rerouted to BART
60, 66	San Leandro, Bay Fair	New lines to BART (later extended)
62A	Bay Fair	New line to BART (later combined with 93A)
66	Coliseum	New line to BART (peak period), later extended
81, 82 (Night)	San Leandro	Rerouted to BART
84	Bay Fair	New line routed to BART
80, 81, 81A, 82, 86	Hayward	Rerouted to BART
81B	San Leandro	New line to BART (later rerouted)
93, 93A	Bay Fair	Rerouted to BART

Line(s)	BART Station(s) Or Route Served	Changes
<u>January 1973--BART Richmond Line Service</u>		
31, 33	Richmond - Oakland	Service reduced
H	North Berkeley	Provided local service to BART
7	Berkeley	Rerouted to BART
14	MacArthur	Rerouted to BART
15	Berkeley, Ashby, MacArthur	Rerouted to BART
17	Ashby, MacArthur	Rerouted to BART
43, 43A	North Berkeley, Berkeley	Rerouted to BART
51A	El Cerrito Plaza, North Berkeley	Rerouted to BART
65	North Berkeley, Berkeley, Ashby	Rerouted to BART
67	El Cerrito Plaza, Berkeley	Rerouted to BART
69	Richmond	Rerouted to BART
72	Richmond, El Cerrito Plaza	Rerouted to BART
72C	El Cerrito del Norte	Rerouted to BART
40	Berkeley	Line extended to BART
78	Richmond, El Cerrito del Norte, El Cerrito Plaza	Line extended to BART
88	North Berkeley	Line extended to BART
70	El Cerrito del Norte, El Cerrito Plaza	New line to BART
72B	El Cerrito del Norte, El Cerrito Plaza	New line to BART (later discontinued)
72M	El Cerrito del Norte	Additional off-peak service provided

EXHIBIT IV (3)

Line(s)	BART Station(s) Or Route Served	Changes
<u>May 1973--BART Concord Line Service</u>		
17	Rockridge	Rerouted to BART
C	MacArthur	BART to San Francisco shuttle service
<u>September 1974--BART Transbay Service</u>		
E	Rockridge, MacArthur	Rerouted to BART
C	MacArthur	BART-San Francisco shuttle service discontinued
L-1	El Cerrito del Norte	Rerouted to BART
K, R, S	Hayward - San Francisco	Service reduced
A, C	Oakland - San Francisco	Service reduced
E, F	Berkeley - San Francisco	Service reduced
0	Lake Merritt	Service to BART discontinued
12, 88	Oakland West	Rerouted to BART
80, 83	Oakland West	Rerouted to BART (westbound direction)

SOURCE: Peat, Marwick & Mitchell, BART Impacts On Highway Traffic And Transit Ridership, May 1977.

. Similar surveys suggest BART's overall image with the public and opinion leaders was not as good as AC Transit's. These surveys also suggest the public and opinion leaders generally did not support BART's preference on AC route abandonment transbay.

- The 1971-72 survey of city councilpersons and newspaper editors showed only 20% rating BART's performance as good to excellent and three out of five felt AC should continue to offer transitory service for the time being.
- Another poll conducted by the Survey Research Center of the University of California at Berkeley between June 1971 and September 1971 interviewed 1,757 randomly selected household heads. The survey showed BART comparing unfavorably with AC on three out of four questions about "organizational image."⁶

The process used by AC Transit and BART to consider transit service coordination did not provide a means to resolve conflict and allow for bargaining and compromise between the two agencies. For example:

- . The General Managers of AC Transit, MUNI and BART, the Project Director for the NCTDP and a few other staff from AC, MUNI, BART and, later, MTC, were the main actors determining what coordination actions took place. The AC Transit and BART Boards of Directors and the San Francisco Board of Supervisors were not involved in the

⁶ Stephen Zwerling, Op. Cit., p. 112.

interactions, except to express dissatisfaction at the lack of any coordination agreements.⁷

- . The Board of Control for NCTDP served in an oversight capacity, not as a forum for compromise on service policy. There is no evidence that the recommendations of the NCTDP, for example, were compromises derived by the Board of Control. In fact, a disclaimer at the beginning of the report indicates none of the recommendations has the approval of the Board of Control.⁸
- . The main BART and AC Transit staff (Al Wolf and Sam Davis respectively) assigned to head up coordination efforts subsequent to NCTDP were not assigned as negotiators to derive formal agreement, but as representatives of the agencies to present agency positions. Interviews with both staff persons indicate no evidence of explicit attempts at bargaining, trades or compromise on issues of AC Transit service changes in anticipation of BART.
- . BART and AC Transit held 37 meetings or joint sessions on service policy from 1967 to 1970 without an agreement forthcoming between the agencies. When BART actors reviewed a

⁷ Perhaps the most active role taken by either AC Transit or BART Boards was the proposal by BART Board member Lange and others that BART should take over AC to ensure coordination. In an interview of June 23, 1977, Lange indicated that this proposal was the extent of BART Board member action on AC Coordination, and that the proposal was not seriously studied. A search of BART files turned up only one staff report on the takeover in response to Board request. See memo from Lawrence Dahms to Lange, December 30, 1969. The AC Transit and BART Boards did meet once in 1970 on coordination, but did not resolve any issues. See memo from Henry Bain to Assistant General Manager, BART, January 22, 1971.

⁸ Speaking to the role of the NCTDP, AC Transit Director Alan Bingham said the Liaison Committee (staff committee established to study and derive coordination plans subsequent to NCTDP) had gone on "without any definitive guidance from the Board of Control." Meeting minutes, special meeting of AC Transit, BART directors and staff, November 6, 1969.

preliminary proposal for AC Transit route changes in 1969, few of their preferences (as in the NCTDP) were met. Too few trunk, transbay and eastbay express lines were changed for BART.⁹

AC Transit and BART held widely divergent and, as each operator claimed, non-negotiable positions on transit service policy.

- . The AC Transit General Manager viewed NCTDP service change recommendations as "points of departure" with BART.¹⁰ Projections about BART's capacity to attract ridership were viewed with skepticism by the AC General Manager and other AC Transit staff to the NCTDP. Consequently, the need for substantial route or frequency changes was questionable to AC.
- . The AC Board President reflected the same view.¹¹ AC Transit took the position on routing that certain lines paralleling BART (Express and transbay) should not be abandoned until AC Transit patrons had the opportunity to continue on AC Transit or select BART.

⁹"AC Transit appears to have almost totally rejected NCTDP suggestions ... No transbay service is abandoned, cut back, rerouted to BART ... the same can be said for Eastbay express ..." Memo to Superintendent, Central Operations, from Transportation and Traffic Analyst, November 19, 1969.

¹⁰Interview with Al Bingham, June 29, 1977.

¹¹In an open letter AC Transit Board President stated in 1971, "Experience will soon tell us, after BART is operational, what adjustments are needed ..." Letter to Joseph Carlton, Piedmont, copies to Governor Reagan, etc., March 5, 1971.

BART actors, on the other hand, preferred the NCTDP recommendations on routing and frequencies. These were "non-negotiable positions" by BART¹² and included all the route changes of NCTDP. BART actors were convinced that AC Transit changes in routes and schedules were crucial to the viability of the rapid rail system. They believed AC Transit could change routes to increase rapid rail system utilization. BART, being fixed, could not change its service coverage. Also, BART Board policy prevented BART from providing feeder service.¹³ When AC Transit made its formal proposal for route changes in 1970, BART Director Stokes wrote to Alan Bingham, "We are very discouraged and perplexed ..." Stokes went on to restate BART's position that more transbay lines should be abandoned and more stations served.¹⁴ By 1972, "There is no 'substantial reduction' in parallel bus service ... transbay service remains unchanged."¹⁵

The wide disparity of these two positions and public statements by each operator of their non-negotiability made eventual agreement more difficult.

BART/AC Transit service coordination did not attract a great deal of attention and/or support from the public, the press and any other outside interest group. For example:

¹² See Robert Rausch memo to file summarizing non-negotiable presentation of Lawrence Dahms, BART, at BART meeting with AC Transit, November 16, 1970. Another BART administrator reflected on BART's non-negotiable stance: "We, BART, are trying to 'bend the will' of AC in this matter (coordination) ... if our inability to 'bend the will' of AC on transbay routes holds up virtually all other progress much longer, it appears to me both BART and AC are in an untenable position with respect to the public ..." Memo to L.D. Dahms from E.R. Preston, Chief of Contracts, November 16, 1970.

¹³ BART Board Resolution No. 508 states, "The Board of Directors does not intend ... to acquire any local transit feeder line or system." March 11, 1965.

¹⁴ Letter, August 7, 1970.

¹⁵ Memo to file, R.W. Rausch, January 20, 1972.

- . Although AC Transit appeared to enjoy a better public image than BART, no public constituency was active in support of or opposition to either operator.
- . More than other newspapers, the Oakland Tribune did cover discussions of AC Transit and BART subsequent to the NCTDP. The Tribune also conducted a poll of readers in 1971 and reported 54% favored a merger of AC Transit and BART, largely because the two agencies appeared unable to agree on coordination issues. The Tribune reporter, Harre Demoro, characterized Stokes and Bingham (the General Managers of BART and AC Transit respectively) as "feuding." However, the Tribune never urged merger or takeover. The Tribune spotlighted the coordination issue but urged no particular public response. By 1974 when the AC Transit/BART service coordination project was under way, the press attended early meetings of AC Transit, BART and MTC, but soon withdrew from attendance.¹⁶ By the time of BART operations, newspaper coverage of coordination studies and discussions was meager.
- . City decision-makers, the State Legislature and Federal government were only peripherally involved in AC Transit/BART coordination discussions. One mayor at the Contra Costa County Mayors Conference, July 15, 1970, accused AC Transit of competing with BART, but no conference resolutions about AC Transit/BART coordination resulted. The Legislature generally looked to MTC to help resolve AC Transit/BART conflicts.¹⁷ Assemblyman

¹⁶ Interview with Paul Bay, Deputy Director, MTC, June 22, 1977. Also a review of newspaper articles on AC Transit/BART coordination efforts from 1967 to present reveals little coverage of the 1974 service coordination project.

¹⁷ An early draft of MTC legislation empowered the Commission to decide unresolvable disputes between transit operators over fare structures and routes. This clause expressing legislative intent was dropped after transit operators lobbied against it. See David Jones, et al., MTC: An Innovative Experiment in Incremental Planning A Cautious Experiment in Regionalism (Palo Alto: Stanford University), 1974, p. 3.

John Knox in May 1970 proposed hearings to merge AC Transit, MUNI and BART because they appeared to be competing. However, no legislation came from the hearings. The Federal government urged a liaison committee be formed among AC Transit, BART and MUNI but apparently provided no other incentives to issue the resolution.¹⁸

MTC actors saw MTC as "too new to push hard" on BART and/or AC Transit for resolution on service policies in 1970-72.¹⁹ During these years AC Transit was developing its service proposals in anticipation of BART. (MTC was active after 1972, acting as an intermediary between AC Transit and BART on bus pad redesign at one BART station.)

(2) BART's Impact On MUNI Service Has Been Limited To Providing Some Access Routes While Not Reducing Parallel Routes

Exhibit V outlines MUNI route and service level changes recommended in the NCTDP report and their 1976 status. As suggested by the chart, few of the major Phase II recommendations for changes in routes have been implemented. Improved feeder bus service was generally implemented whereas the proposed downgrading of line-haul service paralleling BART has not been accomplished, despite significant cutbacks in patronage on these routes.²⁰ The NCTDP also recommended a significant change in the character of MUNI transit service by eliminating existing MUNI rail service beyond the Twin Peaks tunnel, providing feeder bus service from outlying areas of San Francisco that would lose rail service. This proposal was defeated by the San Francisco electorate in November 1966.

¹⁸ Secretary Weaver's office within HUD urged on a liaison committee. Memo from Stan Forsythe, BART, to General Manager, July 5, 1967.

¹⁹ Paul Bay, Op. Cit.

²⁰ Peat, Marwick, Mitchell & Co., BART Impacts on Highway Traffic and Transit Ridership (Berkeley: Metropolitan Transportation Commission, May, 1977).

EXHIBIT 2
Public Policy Project
BART-RELATED CHANGE IN MINI BUS SERVICE¹

MINI Line	Recommendation ^a	BART Station(s) Or Route Served	Status 1976 ^b		Number of One-Way Vehicle Trips Per Weekday	
			1972	1976 ^b	1972	Recommended ^a
PHASE I RECOMMENDATIONS ^c						
23	Extend Line 23 north to 24th Street BART Station	24th Street Mission	Implemented	41	65	54
25, 80	Combine Line 25 and Line 80	Powell Street	Implemented	115/89	115	124
51	Extend Line 51 west to Glen Park BART Station	Glen Park	Implemented	107	107	115
53	Extend Line 53 west to 16th Street BART Station	16th Street Mission	Implemented	64	65	70
PHASE II RECOMMENDATIONS ^d						
10	Reroute line 10 east of Glen Park BART Station to Bayshore Boulevard	Glen Park	Protested and not implemented	106	106	107
14GL	Adjust service on Line 14GL	Mission Corridor	Protested and only partially implemented	9 (5 one-way)	9 (all one-way)	14
14L	Eliminate Line 14L	Mission Corridor	Protested and not implemented	58	--	30
14X	Adjust service on Line 14X	Daly City - San Francisco via Freeway	Partially implemented	44 (16 one-way)	22 (all one-way)	28
15	Eliminate turnback of Line 15 at Arleta and through-route to Phelan Avenue	Bayboa Park	Protested and not implemented	126	150	184
17X	Adjust service on Line 17X	Daly City - San Francisco via Freeway	Protested and only partially implemented	39 (6 one-way)	18 (all one-way)	29
26	Shorten Line 26 to Alemany Boulevard at Arch Street	Mission Corridor	Not implemented	100	100	99

MUNI Line	RECOMMENDATIONS (Continued)	BART Station(s) Or Route Served	Number Of One-Way Vehicle Trips Per Weekday		
			1972	Recommended ^a	1976 ^b
PHASE II					
26	Reroute Line 26 from Miguel Street to Chenery Street	Mission Corridor	100	100	99
26X	Eliminate Line 26X	Mission Corridor	13 (7 one-way)	--	4
36	Reroute Line 36 to Balboa Park and Daly City BART Stations	Daly City, Balboa Park	53	73	53
44, 51	Combine Lines 44 and 51	Glen Park	55/107	89	53/115
52	Increase Line 52 headways	Balboa Park	62	55	54
72	Extend Line 72 south to Daly City BART Station	Daly City	67	67	67
81	Reroute Line 81 to Balboa Park BART Station and extend to Ocean View District	Balboa Park	43	73	42
K	Extend Line K east to Balboa Park Station	Balboa Park	149	149	139

SOURCE: Peat, Marwick, Mitchell & Co., BART Impacts on Highway Traffic and Transit Ridership, May 1977, p.52.

a. SOURCE: MUNI-BART Coordinated Transit Planning Project, Final Report.

b. SOURCE: San Francisco MUNI, Scheduling Department (Effective December 1976).

c. Recommended for implementation immediately after BART began service.

d. Recommended for implementation when BART reached six-minute headways and when the 50% MUNI transfer discount was initiated.

The following paragraphs suggest why service policy as well as major system alteration recommendations were generally not implemented.

The majority of significant MUNI service level recommendations required reductions or abandonment of parallel service and, to a lesser extent, additions in feeder service. The cumbersome procedures required to reduce or abandon any service impeded any implementation of NCTDP recommendations. The City Charter requires the approval of the Board of Supervisors as well as the Public Utilities Commission for any MUNI service abandonment.²¹ The courts have broadly interpreted this authority by including any reduction in service within the definition of service abandonment, leaving almost no discretion for MUNI management. Both the Board and the Commission generally hold public hearings on each service level question. The Board has been reluctant to change service levels even if only modest public protest is evident. In the case of BART-related changes, public opposition generally delayed or averted proposed service change. As many have said, "... city government is so muscle-bound because of the obsolete charter that the best transit manager in the country would have been frustrated."²²

MUNI appeared to lack adequate staff resources to respond to BART plans and coordination issues.²³ In the early stages of BART design and construction, the principal coordination between BART and MUNI was conducted through a temporary organizational arrangement:

The Technical Advisory Committee (TAC) was an inter-departmental committee responsible for BART-related policy decisions.

²¹ San Francisco City Charter, Section 3,595, amended 1971.

²² Bill Dorais, "Transit Trauma," San Francisco, September, 1967, Vol. 9, No. 9, p. 33.

²³ The need for extensive coordination on the design and construction of the MUNI Subway increased the complexity of MUNI/BART interactions compared with those of AC Transit and BART.

- . The Transit Task Force was a staff unit formed to support the TAC and maintain day-to-day interactions with BART.

The Task Force was originally expected to borrow staff from three City departments: MUNI, Planning and Public Works. MUNI was the only department that did not transfer staff, having no available planning staff and limited engineering resources. Key informants suggest this lack of staff probably hampered MUNI's ability to effectively coordinate with BART.

Interviews with MUNI staff suggest that MUNI planners and management placed coordination with BART as a low priority. They felt that MUNI must exert every effort to serve trips within San Francisco, where most of the trips are not between points in the downtown area. Also MUNI staff did not feel that many of the trips that originate with MUNI actually end up on BART to the East Bay or that City residents are actually using BART. The number of San Mateo County riders on the BART line, and the fact that BART service is currently below eventually expected levels, make the use of BART undesirable to residents along the Mission corridor. MUNI received little public pressure to make access to BART easier. Therefore, the ease of making a MUNI/BART trip was not a high priority for MUNI planners.

The public, press and outside interest groups were vocal on improved MUNI service within San Francisco but expressed little concern about BART/MUNI coordination. For example:

- . The San Francisco electorate defeated proposition B in November 1966 to significantly upgrade the MUNI system based on NCTDP recommendations. Key informants claim the defeat of the proposal (basically an expanded rapid transit system for San Francisco) indicated most residents' preference to continue to use local MUNI service rather than to use rapid transit or a combination of feeder bus service and rapid transit.²⁴ Citizen groups also successfully opposed most BART-related recommendations for reductions in MUNI service.

²⁴ See Bill Dorais, "Transit Trauma," and interviews with Bill Dorais and John Jacobs (SPUR).

- . During the primary period of coordination efforts (1969-1973), almost no press coverage of MUNI dealt with service policy coordination with BART. Rather, press coverage concentrated on either the construction of the MUNI subway by BART or the dispute over the allocation of San Francisco's share of Transportation Development Act funds (1971) between BART and MUNI.
- . The San Francisco Planning and Urban Renewal Association (SPUR) and the Greater San Francisco Chamber of Commerce echoed the generally adverse public perception of MUNI in highly critical studies released in 1973 and 1974, respectively.^{25,26} Both of the studies pointed to the deficiencies of the system. They traced the causes of MUNI's problems to a failure of the City leadership to fund MUNI properly and the organization structure that does not give the MUNI General Manager the tools to effectively run the system. These reports contain almost no reference to coordination with BART.

3. BART COORDINATION EFFORTS RESULTED IN LIMITED IMPACTS ON FARE POLICY BUT DID RESULT IN AGREEMENT ON INTERIM TRANSFER POLICIES

BART-related fare and transfer policy changes for AC Transit and MUNI were addressed in the same forum as service policy changes (i.e., based on recommendations of the NCTDP and subsequent coordination studies followed by discussions between BART and AC Transit and BART and MUNI). Characteristics of that forum described in the previous section (e.g., skepticism about NCTDP findings, possible lack of staff resources, lack of a bargaining forum and lack of outside interest pressures) all detracted from the operator's efforts to reach some agreement on fare and transfer policy as well. However, the operators did agree to and implemented an interim transfer system prior to start of BART operations.

²⁵ San Francisco Planning and Urban Renewal Association, Building a New MUNI: An In Depth SPUR Report on San Francisco's Municipal Railway, March, 1973.

²⁶ The Greater San Francisco Chamber of Commerce, Report on the San Francisco Municipal Railway, June, 1974.

Key informant interviews suggested that transfer policy was viewed quite differently than service policy in discussions among operators. NCTDP recommendations on transfer mechanisms were viewed with skepticism by AC Transit and MUNI, much the same as service policy recommendations. The report had recommended a complex system of two way transfers that would have been difficult to implement on the existing bus systems as well as difficult for the public to understand. However, unlike service policy discussions, where both AC Transit and MUNI felt no need to compromise with BART, operators felt the need to devise some sort of transfer system with BART.²⁷ Both operators wanted a transfer scheme, but that required money changing hands and purchase of transfer equipment, necessitating some agreement between operators on cost sharing.

Although a transfer agreement was reached before BART opened, the systems agreed to are referred to as "interim solutions" and operators interviewed agreed the systems should be altered in the future. The basic problem appears to stem from the BART fare equipment itself which is inflexible to modifications for transfer purposes. A committee of representatives of the three operators is currently studying new types of equipment for AC Transit and MUNI and possible modifications to BART equipment as a way to improve the current system.

The following paragraphs present findings on BART-related fare and transfer policy changes by AC Transit and MUNI.

(1) AC Transit Modified Its Zone Fare System In Part Because Of BART And Agreed To A One-Way Transfer System With BART

In decisions on coordination between AC Transit and BART, each agency left general fare policy under its own discretion. Thus, AC Transit general fare policy was not altered by negotiations with BART. There is also no evidence for AC Transit systemwide fare level changes in response to BART's impacts on AC Transit ridership. However, BART was probably one of many reasons AC Transit modified its zone fare policy. AC Transit found its average trip length had declined significantly after BART startup and routing changes. Short feeder trips more than replaced losses in line-haul trips.²⁸ Thus, AC Transit modified its

²⁷ The General Managers of both AC Transit and MUNI noted this distinction.

²⁸ By one estimate, BART has had the effect of adding 26,500 access trips to AC Transit's East Bay ridership, offsetting 9,700 lost trips in line haul trips diverted from AC Transit to BART. Peat, Marwick, Mitchell & Co., BART Impacts On Highway Traffic and Transit Ridership--Document No. DOT-BIP-TM-20-3-76 (Berkeley: Metropolitan Transportation Commission, May, 1977).

local zone system in July 1974. There are apparently no other occasions before or after BART startup when AC Transit experienced such a marked decline in trip lengths.²⁹

Transfer policy agreed to and implemented by AC Transit allows BART passengers to obtain a ticket at BART stations for a free AC Transit trip away from BART. The cost of the trip discount is shared equally between BART and AC Transit, with State SB 325 (TDA) funding initially providing the source of subsidy.³⁰

On transfer policy, there apparently was no conflict or compromise on how the discount would be shared. However, BART's early preferences³¹ that transfer tickets be issued by the bus operators and that one way riders not be provided discounts were not accomplished. AC Transit preferred a one way system from BART to AC necessitating no special AC Transit equipment on buses or driver handling delays. The two way system was "too complex."³² This AC Transit position prevailed. While BART considered the final one way system the best "interim solution" in 1972,³³ the system remains unchanged to this date.

(2) BART Has Had No Impact On MUNI Fare Policy But Both Operators Agreed To An Interim Two-Way Transfer System

MUNI fare policy is set by the San Francisco Board of Supervisors. Only modest fare increases have been implemented during the BART development period (the current fare is 25¢ within the City, 30¢ express, raised from 20¢ in 1970). Decision-making on fare policy has been sensitive to the criticism of community groups and BART has not been used as an argument

²⁹ Interview, Don Larson, AC Transit, June 16, 1977.

³⁰ The initial agreement between BART and AC Transit, dated July 13, 1972, specifies BART pays AC Transit 12.5¢ for each transfer received.

³¹ Liaison Committee meeting minutes, May 20, 1968.

³² Interview with Warren Robinson, AC Transit Schedules and Route Planner, June 23, 1977. Also see Alan Bingham letter to Paul Bay, MTC, October 31, 1973, commenting on MUNI two way transfer system.

³³ "We consider the use of transfer machines the best interim solution at present ..." BART Press Release, May 26, 1972.

in the deliberation. On the other hand, MUNI had a small impact on BART fare policy in that during a MUNI strike in 1975, BART lowered its fares within San Francisco from 30¢ to 25¢ to match MUNI fares.

An effective discount and transfer system was difficult to work out because of technical and practical problems. The BART fare collection system could not be altered; MUNI drivers cannot handle change; MUNI instituted a Fast Pass system that cannot be recognized by the BART fare collection system.

It was agreed that the costs of the transfer system would be shared equally by the two systems. The two-way system adopted is similar to that in operation in the Southeastern Pennsylvania Transit Authority where two transfer tickets are sold in BART stations for 25¢, essentially allowing a round trip to and from the BART station for half the regular fare.³⁴ Since the MUNI fare is 25¢, this represents a loss of 25¢ per transfer which BART and MUNI agreed to share equally.³⁵ Also, a major stumbling block is the revenue loss from inter-operator transfers; for this region, that loss is estimated to be \$10 million annually for all operators combined.³⁶

MUNI staff is not satisfied with the negotiated transfer system. They feel it is not fair to regular MUNI riders. A MUNI-BART-MUNI rider must, in effect, pay two fares. If the ride had been made on MUNI alone, one fare would suffice. In 1974, MUNI instituted the Fast Pass allowing an unlimited number of monthly rides for the price of \$11. Fast Pass holders who wish to make a MUNI-BART ride to an in-city destination would have to pay an extra fare because the BART ticket system does not recognize the Fast Pass. MUNI staff feel that the transfer system is more of a benefit to regular BART riders whose trips end within the City than to MUNI riders. Talks between MUNI and BART continue on ways to improve this system.

³⁴ AC Transit viewed this type of system as too complex. MUNI viewed AC's system as too susceptible to cheating to gain extra free rides.

³⁵ Metropolitan Transportation Commission, Transit Development Program, May, 1974.

³⁶ San Francisco City Planning, Transportation: Strategy and Programs, A Proposal for Citizen Review, 1976.

4. TRENDS IN TRANSIT OPERATOR WAGES AND FRINGE BENEFITS INDICATE THAT BART HAD NO CONCLUSIVE IMPACT ON CORRESPONDING POLICIES AND PRACTICES OF AC TRANSIT AND MUNI

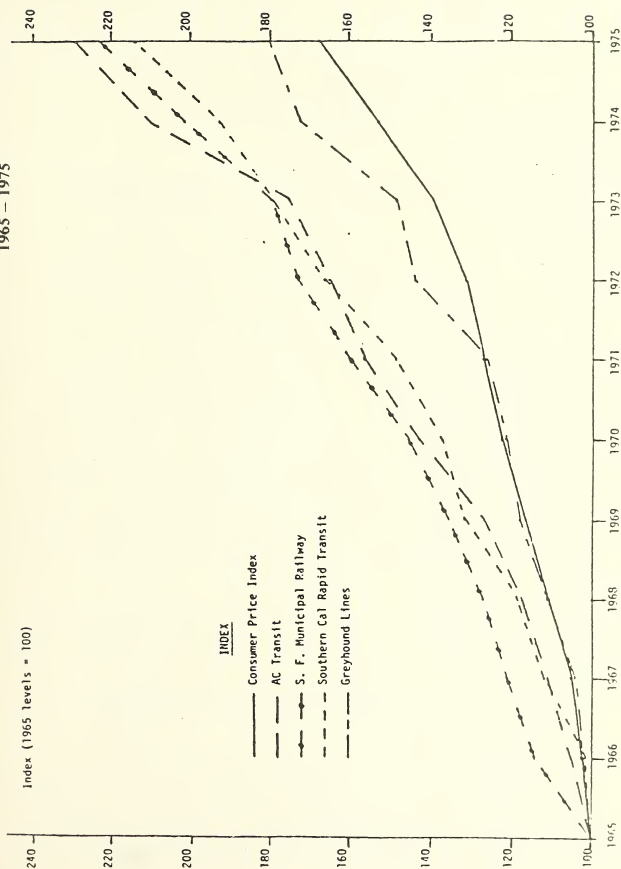
Two sources of information, trend data and interviews, were used to draw conclusions about BART's impact on AC Transit and MUNI wage and fringe benefit policies. The following paragraphs present findings based on an analysis of trend data. Later sections on policies of each operator (AC Transit and MUNI) present findings based on interviews.

A comparison of wage rate trends among several operators suggests it is likely that BART is responsible for a major component in the upward trend in wages at AC Transit and MUNI. Exhibit VI shows recent trends in wage rates for AC Transit, San Francisco Municipal Railway, Southern California Rapid Transit and Greyhound Lines compared with the Consumer Price Index. The exhibit shows that major upswing trends in AC Transit and MUNI are closely paralleled by similar trends in private carrier wages in the Bay Area, and trends in the Consumer Price Index. The important point is that the wage trends in a no-BART area and private carrier are very similar to the overall AC Transit and MUNI trends.

While it is unlikely BART is responsible for the major component in upward trends in AC Transit, MUNI wages, it is not clear whether BART had any more specific influence on wages. Table 1 on page 45 shows in more detail the wage rate histories of AC Transit, MUNI and BART and suggests some uncertainty whether BART had any influence on specific AC Transit and MUNI wage rates and, even if BART has had any effect, it is erratic at best. Changes in wage rates for BART are not closely paralleled at either AC Transit or MUNI. Also, MUNI wage trends are probably not BART-related since from 1969 through 1975 MUNI wages were set under city charter requiring comparisons with systems in other cities, not regional systems; thus AC Transit and BART were excluded from consideration. Regarding AC Transit wage rates, trends indicate that MUNI, not BART, might be providing the prevailing influence. Both in absolute values and in percent differences, AC Transit trends are more similar to MUNI's than are BART's. Again, even assuming BART wages are the prevailing influence on AC Transit, the influence is erratic at best.

Exhibit VII indicates fringe benefit trends for AC Transit, BART, MUNI and the Southern California Rapid Transit District. AC Transit's fringes have increased in absolute and percentage terms more than MUNI, BART or Southern California Rapid Transit District. The largest jump, 37.1%, came in 1974-75, a strike year. The year previous and the same year, MUNI and BART, respectively, had large increases in fringes. Either could have influenced AC Transit. MUNI's fringe benefit trends also seem unrelated to BART's. In

EXHIBIT VI
Public Policy Project
WAGE RATE ANALYSIS FOR BUS DRIVERS
1965 - 1975



SOURCE: California Legislative Analyst, Financing Public Transportation in San Francisco Bay Area, November, 1975, Exhibit A.

EXHIBIT VII
Public Policy Project
ANNUAL COMPENSATION FOR AN
INDIVIDUAL BUS/TRAIN OPERATOR
1973-1976

Fiscal Year	AC Transit		BART		MUNI		Southern California	
	Fringe	% Change	Fringe	% Change	Fringe	% Change	Fringe	% Change
1972-1973	\$ 3,303		N/A	N/A	\$ 3,283		\$ 2,726	
1973-1974	\$ 3,947	19.5%	\$ 3,857	--	\$ 5,202	58.5%	\$ 3,128	14.7%
1974-1975	\$ 5,411	37.1%	\$ 5,361	39.0%	\$ 5,026	-3.4%	\$ 3,310	5.8%
1975-1976	\$ 6,015	11.2%	\$ 5,575	4.0%	\$ 5,144	2.3%	\$ 3,616	9.2%
Total 1973-1977		82.1%		44.5%		56.7%		32.6%

all, changes in fringe benefits have been erratic and insufficient correlation among any of the operators is apparent to allow speculation on causal relationships.

TABLE 1

HOURLY WAGE RATE HISTORY
FOR AC, MUNI AND BART,
1965 TO 1975

<u>Year</u>	<u>AC Transit</u>		<u>MUNI</u>		<u>BART</u>	
	<u>Rate</u>	<u>% Change</u>	<u>Rate</u>	<u>% Change</u>	<u>Rate</u>	<u>% Change</u>
1965	3.16		2.93			
1966	3.31	4.75	3.35	14.33		
1967	3.51	6.04	3.37	11.34		
1968	3.71	5.70	3.92	5.09		
1969	4.00	7.82	4.19	6.89	4.25 (a)	
1970	4.50	12.50	4.49	7.16	4.66	9.65
1971	4.93	9.56	4.93	9.80	N/A	
1972	5.20	5.48	5.32	7.91	4.99	7.08
1973	5.54	6.54	5.54	0.29	5.99	20.04
1974	6.62	19.49	6.22	12.27	7.05	17.70
1975	7.22	9.06	6.81	9.49	7.95 (b)	4.82

SOURCE: Legislative Analyst, State of California, Financing Public Transportation in the San Francisco Bay Area, November 1975, Table II.

- (a) Wage scale for Maintenance Worker II, since there were no BART train operators prior to 1972.
- (b) Excludes employee retirement contributions which are deducted from gross wages. No pension contribution is made by AC Transit drivers.

The following paragraphs describe the perceived impact of BART on personnel policy decisions by AC Transit and MUNI, as viewed through key informant interviews.

(1) BART Had Only A Small, Indirect Impact On AC Transit Wage, Fringe Benefit And Equal Employment Policies

Without reference to BART, both the General Manager and the Personnel Director of AC Transit were asked to name transit properties which provided points of reference and negotiation in bargaining sessions with the Amalgamated Transit Union (ATU). Both named BART as one of the chief agencies referenced in bargaining

discussions. Prior to BART, MUNI provided a main point of reference in labor discussions. New BART wages generally enter negotiation discussions as another negotiating reference point.

AC Transit fringe benefits and equal employment programs follow the same pattern. Interviews with the AC Transit Personnel Director indicate, again, that BART benefits enter negotiation discussions but are made in reference to "many systems" and with the input of a labor relations consulting firm which tracks benefit package trends "throughout the country."³⁷ BART operators contribute 7% of wages to a pension fund. AC Transit drivers do not contribute to their fund. Instead, the district pays in the fund at a rate approximately 11% of gross wages.

Without reference to BART, AC Transit's Equal Employment Program Manager was asked to name models and references for AC Transit's program. He indicated the main models were programs in Los Angeles, Santa Clara, several eastern cities and BART. He indicated all were important to developing AC Transit's program.

(2) BART Has Had Little, If Any, Impact On MUNI Wage, Fringe Benefits And Employment Policies

The BART wage scale and labor negotiations have had little impact upon the wages paid MUNI personnel. MUNI wages and fringe benefits are governed by a formula set forth in the City Charter by amendment in 1959. The City Charter sets the average of the two highest wage rates for transit workers in the country as the maximum for MUNI wages. In 1968, the Charter was amended to also allow MUNI personnel to receive the highest level of fringe benefits paid to a transit property in the country.

Historically, the Board of Supervisors and the Civil Service Commission have given MUNI the maximum allowable wage and fringe benefits. Only once in the past 15 years have MUNI personnel received less than the allowable amount.

BART wages do not enter into the negotiations directly. However, MUNI union negotiators do use the comparison between MUNI and BART wages and working conditions to strengthen their argument to receive the maximum wages and fringe benefits allowable by the City Charter sections.

³⁷ Interview with Robert Shamoon, Personnel Manager, AC Transit, June 21, 1977.

BART may play more of a role in wage negotiations in the future. A proposed City Charter amendment would use California systems, rather than systems across the country, as a guideline for MUNI wages. This would allow BART wages to be used as a specific factor in setting wages and also may increase the movement for cooperative working agreements between the local transit unions. The transit unions in the three BART counties recently lobbied the State Legislature to remove a section of a BART-MUNI-AC funding bill (AB 1107) that would have placed a limit on the wage raises that could be given by the transit properties as a condition for receiving sales tax revenues for operational costs.

V. THE IMPACT OF BART ON NEW OR PROPOSED
TRANSIT SERVICE

This chapter focuses on transit policy at the City and County level in terms of decisions to fund and/or provide new local or feeder transit service and the relationship of such service to BART. The analysis compares the development of transit service in the Bay Area with the State as a whole and examines the reasons for transit services planned, initiated, and not initiated in the vicinity of BART.

Definitions of the various types of transit service are important in assessing the relationship of transit development and BART.

- . New transit service refers to service started by communities or transit districts since the development of BART.
- . Feeder transit service refers to any public or private transit system connecting to and from one or more BART stations.
- . Local transit service refers to routes within a jurisdiction not serving BART or BART extensions.

Two case study transit proposals were selected for detailed analysis. They were:

- . Fremont-Newark-Union City (Tri-City proposal), Alameda County--A new local transit system was approved in 1974 by the voters in Fremont and Newark but not Union City.
- . Central Contra Costa County (Local Mass Transportation Agency)--A proposed local transit system was defeated by public vote in 1974.

These two proposals--one success and one failure--were chosen to provide a comparative means for assessing BART's impacts on the development of local transit systems in general.

This chapter is organized into three sections as follows:

- . Overview of the new and proposed transit systems in the BART District.
- . Fremont-Newark-Union City transit proposal.
- . Contra Costa County transit proposal.

1. MANY NEW AND PROPOSED TRANSIT SYSTEMS IN OR NEAR THE BART DISTRICT SERVE, IN PART, AS FEEDERS TO BART; HOWEVER, THOSE SYSTEMS MAY WELL HAVE COME INTO EXISTENCE WITHOUT BART

Several recently formed transit routes or systems provide feeder service to BART stations. However, most of the systems also provide local service, and came at a time when many other local services were being developed in or near BART areas. Furthermore, the feeder and local services are often funded in the same way as many of these services in other areas of California. Hence, it is likely that many communities now with local and feeder service may have developed similar services without BART.

The most prominent, recently formed transit routes and systems feeding BART also provide local service, and most are supported by Federal and State subsidies common to other new operations in the State. These systems are identified in Exhibit VIII, with funding sources, provider and service type.

If BART was a significant factor in creating an impetus for the development of city and county transit service, then one might expect a trend toward more such systems in proximity to BART than elsewhere in the Bay Area or the State. Table 2 compares trends in the number of city, county and district operators from 1950 to 1974 by planning region. The table shows considerable growth in statewide transit operators, with the MTC region (not identical to the BART district boundaries, but adequate for comparison) somewhat above average in percent growth of new systems. However, a region without BART, CPO, shows the greatest growth. More importantly, all regions show the most marked increase from 1970 to 1974. This timing coincides with the passage of the Transportation Development Act (Mills-Alquist-Deddeh) by the State Legislature in 1971. The act allows $\frac{1}{4}$ of the State sales tax for funding local transit service. (Funds can be diverted to other transportation projects, but transit projects receive the highest priority.) It is probably the availability of this subsidy source rather than BART which caused much of the increase in public transit service in the Bay Area as well as throughout the State.

TABLE 2

THE GROWTH OF CITY AND COUNTY
PUBLIC TRANSIT OPERATORS IN CALIFORNIA
1950-1974

Region*	1950	1960	Percent Change (1950-1960)	1970	Percent Change (1960-1970)	1974	Percent Change (1970-1974)
SCAG	6	9	50%	14	56%	27	93%
MTC	2	3	50	5	67	16	220
CPO	1	1	0	2	100	8	300
Statewide	9	15	67%	28	87%	67	139%

SOURCE: M. Mehdi Morshed, Inventory of Transportation Facilities and Equipment, State Transportation Plan, State Transportation Board, April 1976, Table 17.

* SCAG--Southern California Association of Governments (Los Angeles area)
MTC -- Metropolitan Transportation Commission (San Francisco Bay Area)
CPO -- Comprehensive Planning Organization (San Diego area)

EXHIBIT VIII
Public Policy Project
RECENTLY FORMED TRANSIT SERVICES
IN THE BAY AREA

<u>Jurisdiction</u>	<u>Funding</u>	<u>Provider</u>	<u>Service</u>
Orinda, Moraga	Federal, State, local	AC Transit under contract	Feeder and local
Walnut Creek	State, local	City	Feeder and local
Concord	Federal, State, local	AC Transit under contract	Feeder and local
Pleasant Hill	Federal, State local	AC Transit under contract	Feeder and local
Brentwood, Antioch, Pittsburg, Shore Acres (ECTTA)	Federal, State, local	AC Transit under annexa- tion	Feeder and local
Fremont, Newark	Federal, State, local	AC Transit under annexation	Feeder and local
Union City	Local	Private under city contract	Feeder and local

2. BART WAS ONE OF SEVERAL REASONS FOR INITIATING STUDY AND PLANNING OF THE TRI-CITY TRANSIT SYSTEM; HOWEVER, VOTER APPROVAL OF THE SYSTEM WAS PROBABLY NOT BART-RELATED

This section outlines the process for planning and development of the new Tri-City Transit System and analyzes the relationships of that process to BART. The section is organized into four areas as follows:

- . Background of the Tri-City transit system.
 - . The relationship of BART to Tri-City planning.
 - . An analysis of the 1974 ballot measure campaign.
 - . An analysis of the ballot issue results.
- (1) The Proposal For A Tri-City Transit System Originated In 1970 And Ended In 1974 With A Successful Ballot Issue For Dial-A-Ride And Fixed Route Service

Exhibit IX summarizes the main events in the development of the Tri-City (Fremont-Newark-Union City) Transit System. As the exhibit indicates, the proposal for a transit system originated in 1970 with a cooperative study between AC Transit, BART and a Tri-City Board. The first tax increase measure to fund transit system operations was defeated in 1972. Subsequently, another joint powers board of Tri-City decision-makers developed a proposal for fixed route and dial-a-ride service which, after the withdrawal of Union City, was approved by the voters in 1974. The final system is operated by AC Transit as a special service area within the AC Transit District. The routes feed BART as well as provide local service.

- (2) Providing Local Service Appeared To Be As Or More Important To Tri-City Decision Makers As Consideration Of BART

An examination of expressed and perceived purposes and rationales for transit studies in the Tri-City area beginning in 1970 reveals much emphasis on local transit service. The evidence suggests feeding BART may have been secondary in importance to providing local service. For example:

- . The 1970 DeLeuw Cather study expressed its purpose as "investigating all aspects of forming a public transportation system...and a bus feeder service to BART."¹

¹Fremont Argus, September 11, 1970.

EXHIBIT IX
Public Policy Project
CHRONOLOGY OF EVENTS
TRI-CITY TRANSIT SYSTEM

Date	Event
1970	<ul style="list-style-type: none"> Fremont, Newark and Union City join to study transit systems. BART and AC Transit also join in the study. DeLeuw, Cather was named as consultant.
1972, April 11	<ul style="list-style-type: none"> A Tri-City transit funding measure was defeated by voters (22¢ per \$100 assessed valuation). Proposed system included fixed routes. Ballot measure would have funded operating costs.
1973	<ul style="list-style-type: none"> Fremont, Newark and Union City join to study fixed-route and dial-a-ride. BART and AC Transit also join in the study. DAVE Systems and Alan M. Voorhees are named as consultants.
1974, August	<ul style="list-style-type: none"> Union City withdraws from the Tri-City study and later starts its own fixed route system under contract with a private carrier.
	<ul style="list-style-type: none"> Fremont enters into a contract with AC Transit for fixed route transit service.
1974, November	<ul style="list-style-type: none"> Voters in Fremont and Newark asked to approve annexation to AC Transit for dial-a-ride and fixed route service. The issue asks for 33¢ per \$100 assessed valuation to furnish operating funds to supplement State TDA and fare revenue. System proposed to feed BART and provide local service.
	<ul style="list-style-type: none"> 62% of the 27,753 voters approve the issue in Fremont; 53% of the 5,859 voters in Newark. Dial-a-ride and fixed route service subsequently begins, though at a rate and design different from what the consultant proposed.

- . The first ballot issue (1972) proposed not just a feeder service, but dial-a-bus and express service for broad areas of transit.
- . When a Tri-City Board of Control began another study of transit in 1973, DAVE Systems was named as the prime contractor. DAVE was known for promoting dial-a-ride systems, systems usually associated more with area-wide than feeder service.
- . In many "town meetings" held prior to the 1974 election to explain the proposed system, most questions had to do not with BART feeders but how many buses would serve local communities and activity centers.²
- . In 1974, Don Driggs, Fremont City Manager, expressed his interest in the proposed transit system without reference to BART or feeders, but with much praise for dial-a-ride as "the system of the future for suburban public transit..."³
- . Fremont Mayor Donald Dillon mentioned BART publicly in connection with the planned transit system. However, he focused not on BART's presence as a transit system but on its importance to gaining MTC support in attaining gas tax funds.⁴ When it appeared BART might be more of an obstacle to gaining State funding than an aid, because of State Legislators' disenchantment with BART, Dillon was not dissuaded from considering transit for Fremont, as he might if BART as a transit system or key to MTC support were critical to his concept of transit for Fremont. Instead, he suggested, "The City might be better off picking up the tab."⁵

²Memorandum to File Summarizing Town Meetings, Art Lorenzini, April 18, 1974, Fremont Tri-City File.

³Letter to Leo Trombatore, CALTRANS, no date.

⁴In March 1973, Dillon said he "didn't think Bort or any other commissioners could turn down any local request designed to tie into BART." Fremont Argus, March 3, 1973.

⁵Fremont Argus, February 25, 1974.

- . Art Lampert, Fremont City Councilman active in the effort to promote the transit ballot measure, believed the primary purpose of the system was to serve the elderly, young and poor rather than discourage auto use. Lampert is convinced his campaign for transit would have gone on irrespective of BART's presence in the city.⁶

(3) The 1974 Ballot Measure Was Supported By Important, Diverse Actors And Interests And Had No Major Opposition. Dial-A-Ride And AC Transit Were Far More Prominent In Campaign Literature And Discussions Than BART

The nature of the actors and their interests and perceptions during the 1974 bond issue campaign suggests that BART was seldom a reason for or against the proposal.

- . Diverse interests supported the measure, including the Mayor, Chamber of Commerce, an ecology group and an organization of retired persons. There were no opposition groups.
- . One of the active campaigners for the measure, Art Lampert, Fremont City Councilman, pushed the measure as a result of his desire for mass transit and dial-a-ride and visits to systems outside the BART area in La Habra and La Mirada.
- . The only important objection to the Tri-City plan came from Union City. As with supporting arguments, objections were centered on AC Transit, costs and issues of control over transit, nor BART.⁷

⁶Interview, July 15, 1977.

⁷Union City Councilman Dick Oliver, representative to the Tri-City Board of Control, indicates he did not vote to remain with the Tri-City Board and proposal only because of his objections to AC annexation. He would have supported the ballot issue had the same service been proposed under contract with AC Transit. Interview, Dick Oliver, July 20, 1977.

- When questions about the ballot measure were raised, they were generally not BART-related, but concerned costs, service for special user groups, and centers served in and outside of town.⁸

Public information and ballot arguments circulated during the campaign emphasized dial-a-ride and local transit service and seldom mentioned BART feeder service as an argument for the proposal. For example:

- Pamphlets mailed to all residents promoting and informing them of the measure featured dial-a-ride bus pictures throughout and began, "Measure J--Dial-A-Ride Bus System." Four information blocks inside the pamphlet cover AC Transit; benefits of dial-a-ride, and financing. There was no mention of BART feeders though a route map shows connections to BART as well as local service routes.
- Ballot measure J provided arguments in favor of Issue J, but none against. Of the seven paragraphs presented in the pro argument, five contain mention of dial-a-ride and one mentions BART.
- The Fremont Argus, the main newspaper in the area, took no formal position on the ballot measure, but gave extensive coverage to Tri-City meetings. Just prior to the November 1974 election, the Argus gave a very positive report on the Richmond dial-a-ride just starting, pointing to comfortable buses and well trained controllers.⁹ The article describes the dial-a-ride as a startling success. The fact that the Richmond system carried few BART patrons was reported but did not dampen the article's enthusiasm.

⁸See Fremont Argus, "Transit Meeting," July 27, 1973. Also memorandum from Doug Eads, Administrative Assistant, Fremont, to the City Manager, June 21, 1974, summarizing meetings with service groups.

⁹Fremont Argus, "Fremont's Bus Plan Already At Work," October 17, 1974.

(4) An Analysis Of Fremont-Newark Voting Returns By Precinct Shows Proximity To Proposed BART Feeder Lines Was Not Significantly Related To The 1974 Ballot Issue Results

All registered voters received detailed maps of line haul, feeder and dial-a-ride proposals as part of the information on the 1974 ballot issues I and J. It is, therefore, possible to assess BART's impact, if any, on the success of the ballot measure, where success may be defined as percent yes vote. Since all voting areas were shown to receive dial-a-ride, one might hypothesize that:

- . Precincts abutting line haul service to a BART station and close to BART would vote proportionately more for the ballot measure than precincts without line haul service and far from BART.

To test this hypothesis, a sample of precincts from two areas was selected and results were compared:

- . The vicinity around Warm Springs, about six miles from the nearest BART station (Fremont) with no line haul service proposed to the station, but with dial-a-ride proposed.
- . A set of precincts abutting or straddling proposed peak period line haul service to BART (Union City).¹⁰ Dial-a-ride was also proposed for the area.

The results of this analysis are included in Table 3, on the following page. The vote in the two sample areas does not differ significantly. Thus, proximity to BART connecting transit service appears not to have influenced voters on the 1974 Fremont-Newark transit ballot issue.

¹⁰Precincts along a proposed line haul service to Union City present less opportunity for the returns to be confounded than precincts along proposed lines to the Fremont Station. The vicinity of Union City BART has many fewer shopping and business districts than the Fremont BART vicinity, so that voting returns along the line to the Union City Station can be more reasonably attributable to BART as a destination than in the case of Fremont.

TABLE 3

THE PROPORTION OF YES VOTES FOR PRECINCT SAMPLES (a)
CLOSE TO AND FAR FROM BART CONNECTOR TRANSIT SERVICE,
FREMONT-NEWARK 1974 BALLOT MEASURES I AND J

Close To BART (b) (<3 miles by bus line haul)		Far From BART (c) (≥5½ miles, no line haul)	
Precinct #	% Yes	Precinct #	% Yes
93183	56	93770	61
93192	61	93790	56
93195	68	93800	61
93194	57	93801	59
93191	61	93802	57
95152	51	93809	47
95151	55	93810	57
		93880	66
Mean % Yes:	57.63%		58.00%
Standard Deviation:	5.55		5.48

- a. 1974 precinct maps were obtained for the analysis.
- b. Precincts selected along Jarvis and Decoto Streets between the BART Union City Station and Newark Boulevard.
- c. Precincts selected in Warm Springs vicinity including nearby housing tracts, but excluding the very sparsely populated precinct 93830.

3. BART PROVIDED SIGNIFICANT IMPETUS FOR THE INITIAL STUDY OF TRANSIT IN CONTRA COSTA COUNTY; HOWEVER, EVENTUAL DEFEAT OF THE PROPOSAL WAS ONLY PARTIALLY, IF AT ALL, BART-RELATED

This section presents the main reasons for study and eventual defeat of local transit proposals in Contra Costa County, emphasizing the role of BART as a system and organization. The section is organized into three areas as follows:

- . Background of the Contra Costa County transit proposal.
- . Reasons for initiation of transit proposals.
- . An analysis of the 1974 ballot issue campaign.

- (1) The Proposal For A Transit System To Serve Central Contra Costa County Was Initiated In 1972 And Ended With The Defeat Of A 1974 Ballot Issue

Exhibit X summarizes the main events in the development of the unsuccessful ballot proposition to initiate transit in central Contra Costa County. The proposal was initiated in 1972 with a recommendation by the Contra Costa Conference of Mayors to study transit needs and proposals for the County. Out of the conference grew recommendations for the formation of the Local Mass Transportation Agency (LMTA), a joint powers organization of several cities and the County. In 1973, this agency jointed with MTC, BART and AC Transit to study transit proposals with the assistance of consultants, Alan M. Voorhees & Associates and DAVE Systems. The LMTA developed a proposal for transit in a so-called County Service Area T-2. Transit included dial-a-ride and fixed routes. LMTA also developed a Measure L to fund the operating costs in excess of the State TDA sources. Subsequent to the defeat of Measure L, local transit jurisdictions in the County have started several of their own transit services which generally feed BART and provide limited local service.

- (2) The Issue Of Feeding BART Provided Important Impetus To Initial Study Of County Transit, But Other Expressed Needs And Issues Soon Drove Transit Discussions

Evidence about the early role of BART in the development of the transit proposal for area T-2 reveals the expressed purposes of the proposals are BART-related. For example:

- . The 1972 minutes of the Contra Costa County Conference of Mayors revealed repeated reference to the committee study on "feeding commuters to BART stations," "feeder bus programs," and the like. Local transit service was also mentioned, but feeder service was more prominent.¹¹
- . The two main purposes of the 1970-1971 Contra Costa Transportation Needs Study were "to provide feeder service to BART stations and provide for local trips within the study area."¹² Reference was also made to the possibility of Greyhound withdrawing service, thus creating more demand for BART.

¹¹See minutes from February 3, 1972, through September 6, 1973.

¹²Contra Costa Transportation Needs Study, DeLeuw, Cather & Company, December 1971.

EXHIBIT X
Public Policy Project
CHRONOLOGY OF EVENTS
PROPOSED CONTRA COSTA COUNTY TRANSIT SYSTEM

Date	Event
1970-1971	County commissioned a county-wide transportation needs study done by DeLeuw Cather & Company.
1972	A five member committee of the Contra Costa County Conference of Mayors recommended study of transit for the central County and formation of a Local Mass Transportation Agency (LMTA). LMTA was formed. ^a
1973	MTC, BART, AC Transit and LMTA joined together under a joint powers agreement to develop a transit proposal for the County. Alan M. Voorhees and DAVE Systems were consultants for the study.
	Proposal for a service organization to provide transit, initially under AC Transit contract, then under annexation, or as its own transit district. The Board of Supervisors created a service area called T-2.
1974	Measure L was presented to the voters. The proposition provided a maximum property tax of 35¢ per \$100 assessed valuation to fund part of the operating costs coming from fares, TDA and Federal funding. Dial-a-ride and fixed route service made up the proposal, with some service connecting to BART.
	Voters defeated the proposition 67% no to 33% yes with 86,998 returns.
1974-1977	Some local jurisdictions initiated transit service funded by State, Federal and local sources. Some of the service feeds BART.

^a The County and eight cities made up the LMTA: Antioch, Clayton, Concord, Lafayette, Martinez, Pleasant Hill, Pittsburg and Walnut Creek.

- . County staff working with consultants on the 1970-1971 Needs Study reflected that it was important to gear the study to BART commuters, not just the elderly or handicapped, if passage of any tax issue was to have a chance.¹³ Thus, BART connections became important in planning. Also, BART and AC Transit support was thought essential to gaining State funding.¹⁴
- . A 1973 resolution of the Board of Supervisors to form the County Service Area had several whereas clauses, one stating, "The need for local mass transit to effect the complete efficiency of BART."¹⁵

As the LMTA took shape and began discussions with its technical and local advisory committee, the needs for local transit came to play a strong or stronger role than BART. BART feeding became presumed and other issues came to the forefront, including serving the young or elderly, and the need for local transit.

- . The Contra Costa Times discussed the LMTA proposal in 1973 and stated AC buses to BART would provide feeder functions. "The LMTA system would serve BART stations only incidentally, being a complete local bus system for getting around the Central and Eastern County."¹⁶
- . The Times reported on discussions at a 1973 LMTA meeting, indicating "sore points" including, "Should the needs of the elderly and poor ... be served first, or should commuters be given the edge."¹⁷

¹³Interview with Paul Kilkenny, Assistant Director Public Works, July 18, 1977.

¹⁴County staff and others involved in the Technical Advisory Committee (TAC) realized SB 325 funds would come to the County Service Area only through BART or AC Transit. TAC Meeting Minutes, November 20, 1973.

¹⁵December 20, 1973.

¹⁶Contra Costa Times, "BART Feeder Buses," November 16, 1973.

¹⁷Ibid., "Pressure Builds," October 19, 1973.

Two actors actively involved in the development of the LMTA and the campaign for the 1974 ballot measure stated BART was to be a "cornerstone" for transit proposals as they developed,¹⁸ but the need for local service was equally or more important to their campaign efforts. One decision-maker even expressed concern that feeder functions, if extensive, could take away local business. Both actors contend they were concerned before and after BART with limited mobility persons and would have fought for transit without BART.

(3) BART As A System Or Organization Played Only A Small Role In The 1974 LMTA Ballot Issue Outcome

Issues of costs and benefits, not BART, concerned decision-makers in cities to be part of the T-2 service area. The issues of property tax costs and system benefits to each community were of particular concern, leading to long debate about variable tax rates for communities with different combinations of dial-a-ride and fixed route service.¹⁹ Even the League of Women Voters, the most active outside interest working for the passage of Measure L, expressed concern on this issue.²⁰ AC Transit made the point that variable tax rates might hurt chances for annexation to AC at a later date, with MTC supporting this concern and BART neutral.²¹ The variable rate did not become part of the ballot issue.

¹⁸Interviews with Leonard Grote, Richard La Pointe, Councilpersons, Pleasant Hill, Concord, respectively, interviewed July 21, July 22, 1977.

¹⁹Decision makers in Pittsburg, Antioch and San Ramon Valley repeatedly opposed a uniform rate and threatened pullout of the proposed district. See, for example, Contra Costa Times, "Tax Rate," May 31, 1974. Orinda, through Banducci, expressed concern for subsidizing other areas. See Contra Costa Times, "Orinda Plans," June 12, 1974.

²⁰In a letter to LMTA, dated June 13, 1974, the League supported the property tax rate of 35¢, but stated a preference for other than property taxes and for better definition of how each area served would be represented in the Service Area Board.

²¹Technical Advisory Committee Minutes, January 24, 1974.

The Contra Costa Times highlighted the high costs and subsidies of the nearby Richmond dial-a-ride, an integral part of the T-2 proposal, just before the November 1974 election. It also gave attention to individual communities planning to go ahead with their own form of local transit without T-2, plans purported to cost less for the same or better service.²² Clearly, these and other issues were centered more on local transit than feeder or BART-related concerns.

The campaign for the ballot issue had the support of several important organizations, but never gained widespread attention. BART played only a mild supportive role. The opposition was not terribly active, but pressed hard on issues of concern--cost and benefits.

- . Decision-makers who suggested the issue found little interest or information about it among constituents and characterize the campaign as "weak."²³
- . Supporters found it difficult to raise funds for the campaign and professional brochures.²⁴
- . County Supervisors appeared mildly supportive of the measure, at best. Supervisors asked LAFCO to create district boundaries rather than propose boundaries for LAFCO approval, and otherwise reflected with skepticism on the T-2 proposal.²⁵
- . Groups representing the elderly supported the ballot proposal, but with no mention of specifics such as BART or dial-a-ride.²⁶

²²Contra Costa Times, October 18, 1974. An editorial supported a bus system for the County in general terms, December 13, 1973. No further editorials were discovered.

²³Interview with Leonard Grote, Richard La Pointe, Op. Cit.

²⁴Contra Costa Times, "How to Sell Bus System Is Question," June 28, 1974.

²⁵Contra Costa Times, "Supervisors Dump Transit Issue", May 8, 1974.

²⁶A County-wide meeting of 14 planning committees urged approval of a mass transit system in 1974.

- . A couple of Chambers of Commerce and the Central Labor Council supported the issue, but either passively or with reservations.²⁷
- . The Federal role was minimal except for EPA. EPA publicly encouraged BART to expand its system, abandon parking lot plans and lend support to feeder bus systems, "as on the November 5 ballot."²⁸ However, EPA was never mentioned in minutes of the LMTA or its Citizens and Technical Advisory Committee.
- . BART promises for express bus extension routes created opposition to the T-2 proposal among at least some citizen advisory groups in the County. The Danville, Alamo, San Ramon Citizens Advisory Group opposed the proposed T-2 tax rate and dial-a-ride as long as it seemed likely BART bus extensions would serve the area.²⁹ On the other hand, precinct returns from all areas, including outlying areas slated for extensions, were very uniformly against the issue.³⁰ Thus, it appears BART extension issues were not an overriding concern to the opposition.

²⁷One member of the Concord Chamber of Commerce called dial-a-ride "ridiculous" but the Chamber voted to support the November issue. Contra Costa Times, July 1974.

²⁸Contra Costa Times, "County Facing Stiff Parking Regulations, EPA Says," October 15, 1974.

²⁹Citizens Advisory Meeting Minutes, February 1974. This advisory group proposed a 1¢ tax per \$100 assessed valuation to support service area planning only.

³⁰The average percent no vote across cities was 67%, with standard deviation = 2.58. Unincorporated areas voted 70% no.

VI. THE IMPACT OF BART ON TRANSIT FINANCING

BART was originally expected to fund its operations and capital costs beyond basic systems construction through farebox revenues. BART's inability to meet this expectation meant the need for additional public financial support for transit in a three county area already providing about the highest level of per capita public support for transit in the country.

This chapter analyzes the impact of BART, in its need for greater public financial resources, on State, regional and local funding of other transit operators in the BART counties, and on State and regional transit finance policy.

The following paragraphs summarize findings in the three areas considered in this study.

(1) BART's Impact On The Ability Of Local Transit Operators To Obtain Local Funds For Transit

The construction of BART placed an additional property tax burden on taxpayers in the three BART counties over what was expected under the No-BART Alternative. Despite this additional property tax revenue allocated to local transit, BART appeared to have little or no impact on the willingness of local officials to fund local transit service (in this case AC Transit and MUNI service).

(2) BART's Impact On The Availability Of State And Regional Funding For Local Transit

BART caused a reduction in State and regional funding to other local transit operators over what would most likely have been available under the No-BART Alternative. BART's financial deficits forced State officials to create new sources of revenue for transit finance in the BART District counties. However, these new sources could well have been available to other BART county transit operators eventually, even in the absence of BART. In addition, local operators (AC Transit and MUNI) would have been eligible for additional funds in BART's absence which are now allocated to BART.

(3) BART's Impact On State And Regional Transit Finance Policy

BART was the primary cause for significant changes in State and regional transit financing policies. These changes included the initiation of major transit finance policy studies addressing problems just in the three BART counties, the establishment of special State policy guidelines only for the three BART counties and the strengthening of MTC's role in monitoring the efficiency of all BART county transit operators.

This study of transit finance policy dealt with the revenue and funding aspects of transit only. BART's impact on operating costs and fare revenues was studied separately by the Transportation System and Travel Behavior Project of the BART Impact Program and will not be discussed in this report.¹

This chapter is organized into four sections as follows:

- . Introduction--describing current public funding sources for transit in the Bay Area and the financial situation of BART county operators.
- . The Impact Of BART On Transit Funding (Sections 2 and 3)--describing BART's impact on funding from two sources:
 - Local governments and special districts
 - State and regional governments
- . The Impact Of BART On Transit Finance Policy--describing changes in State, regional and local policy due to BART.

1. FINANCIAL RESOURCES FOR TRANSIT HAVE INCREASED DRAMATICALLY IN THE PAST DECADE, BUT NOT ENOUGH TO AVOID PROJECTED UNFUNDED DEFICITS IN THE BART COUNTIES

During the period of BART system planning and construction, the transit financing picture has changed dramatically. BART was originally expected to generate revenues in excess of expenditures; however, revenues represented only about 32% of total expenditures in 1975.² A variety of new Federal, State and regional funding sources for transit have been added since 1964. Still, the gap between revenues and expenditures continues to rise.

1. See Peat, Marwick, Mitchell & Co., BART Impacts On Bus Operating Costs And Fare Revenues (Working Note), (Berkeley: Metropolitan Transportation Commission, July 1977).

2. State of California Legislative Analyst, Financing Public Transportation In The San Francisco Bay Area (Three County BART District), November 1975, p. 29.

This section describes the current sources of transit funding for the Bay Area operators and discusses the current financial situation of BART county operators.

(1) Local Property Tax Support And Fare Revenue Still Provide The Majority Of Transit Revenues In The San Francisco Bay Region

Exhibit XI depicts the current breakdown of funding sources for transit in the Bay Area. As the chart indicates, local support (property tax) and operating revenues are the primary revenue sources to fund operating expenditures, while Federal funds remain the primary source of capital financing.

Federal sources continue to provide the greatest share of total operating and capital funding for transit in the Bay Area. Federal transit funding was projected to exceed \$425 million over the three year period 1975-1978 with 90% of this amount coming from National Mass Transportation Assistance Act (NMTA) grants.³

State financial support for transit in the Bay Area appears to be noticeably lower than State support for transit service in other metropolitan areas. In 1973, MTC conducted a comparison of transit financing in 13 metropolitan areas throughout the country.⁴ The San Francisco Bay Area ranked lowest in level of state contribution for transit.

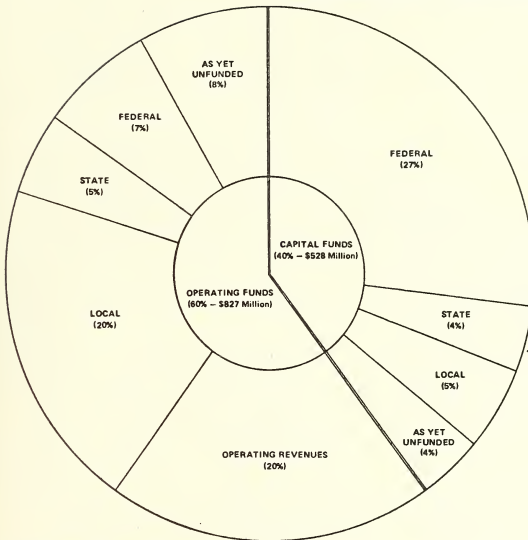
In contrast, local support for transit in the Bay Area is more comparable with local contributions in other metropolitan areas. The same MTC survey indicated that the Bay Area ranked about average in level of local funding (as a percentage of total funding only) for transit.

Exhibit XII provides a description of each of the current sources of Bay Area transit financing. The exhibit also includes information on existing allocation authority and policy. Primary authority for allocating State, Federal and some local funds resides with MTC in the Bay Area. Current allocation policies generally assume fixed percentages relating financing levels to patronage or population.

3. Metropolitan Transportation Commission, Transportation Finance Task Force, Revenue Sources For Transit Support (Summary), January 12, 1976, p.6.

4. Ibid., p. 7.

EXHIBIT XI
Public Policy Project
FUNDING SOURCES FOR BAY AREA TRANSIT*
EXISTING RESOURCES – FY1975-6 TO 1977-8



* SOURCE: Metropolitan Transportation Commission,
Transportation Finance Task Force,
Revenue Sources For Transit Support (Summary), January 12, 1976, Page 5.

Source of Funds	Type of Source	Date of Origin	# of Total Transfers (1975-76)	Use of Funding	Allocation		Restrictions And Conditions
					Authority	Procedure	
1. Property Taxes	Local	1945	27A	Operating	City, county governments Regional transit districts	Allocated to meet unfunded deficit of transit operations within legal (SB 60) limits of local jurisdictions	Limited by SB 60 provisions At most 5% of property tax rate can be used for public purposes
2. Sales tax	Local	1969	12A	Operating and rolling stock	State Legislature	% of three county sales tax currently allocated in total to BART	
3. TEA (Transportation Development Act)	Local	1971	11A	Operating, Some capital	MTC (originally authorized by State Legislature)	Funds returned to local origin (4% of sales tax) Funds allocated to different operators within the same county primarily on patronage levels	Cannot be used for rolling stock at five-year location at no more than 8% of an individual county's funding may be used for operating expenses Funds must be used to construct public transit for public transit service 100% of annual TEA funds must go toward rolling stock for capital expenses of fixed guideway projects
4. State Highway Funds	State	1974	41A	Capital--fixed guideway only	State		
5. NMTA Section 3	Federal	1964		Capital	UMTA (based on MTC review and comment)	Grants approved on an individual project basis Projects must be included in Regional Transportation Improvement Program	20% local match required
6. Section 5	Federal	1974		Operating and capital	MTC	Allocated to county by formula--50% by total population, 50% by population density--then allocated proportionately to operators	20% local match required for capital grants, 50% for operating grants Local funds matching federal grants must be maintained at the average level of the previous two years
7. Section 9	Federal		49A	Planning and technical studies	Federal committee including representatives of Department of Transportation (DOT), and Housing and Urban Development (HUD)	Allocation based on federal funded program of planning activities	
8. General Fund Sharing	Federal	1972		Operating	City and County government	Allocated as part of General Fund revenue in San Francisco. Not used in any other BARTD county for transit functions	
9. Federal Aid Urban	Federal	1973		Capital	MTC, Council of Mayors, Boards of Supervisors	Projects are vetted among projects by objective scoring system	
10. Or dis to be	Local	1975	None yet	Capital	MTC		For capital projects only in vicinity of bridges

(2) BART Is A Partial Cause For The Comparatively Higher Level Of Transit Funding Provided By BART Counties Compared With Other Bay Area Counties And Other California Regional Areas

Exhibit XIII summarizes per capita revenue support for transit in BART counties compared with other Bay Area counties. In the three BART counties, local financial support for transit averaged \$66 per capita in 1975, substantially higher than any other Bay Area county and generally the highest in the nation.⁵ Federal fund allocations, on the other hand, are not always as high in the BART counties as in other counties. Since BART requires a significant portion of local revenues, BART clearly had an impact on the high level of funding commitment.

Exhibit XIV summarizes available revenue sources by type for each region within the State of California. The exhibit highlights the substantial portion (56%) of all transit revenues in the State that is used within the San Francisco Bay Area (representing less than 25% of the total State population). The Bay Area's local revenue contribution is also substantial (\$203 million) when compared with other regions (the next highest is SCAG at \$91 million). Again, BART was a major contributing factor to the high level of not only local, but other sources of revenue for transit in the Bay Area.

(3) Despite Increases In Outside Revenues, Bay Area Transit Operators Are Facing Increasing Deficits

Exhibit XV depicts projected deficits in excess of \$100 million by 1980-1981 for transit operators in BART District counties. This substantial unfunded deficit projection has two primary causes:⁶

- . Operating costs have risen dramatically in the past decade. Materials, equipment and energy costs have risen at a higher rate than inflation; however, the most significant increase has been in labor costs. Labor settlements intended to catch up for longstanding disparities have resulted in wage increases far in excess of those given to non-transit employees. For example, between 1960 and 1975, transit worker wages increased 175% compared with a 123% increase in local manufacturing wages and an 81% increase in the consumer price index.

5. Metropolitan Transportation Commission, San Francisco Bay Region Transit Financing Study Summary, January 10, 1977, p. 3, 11.

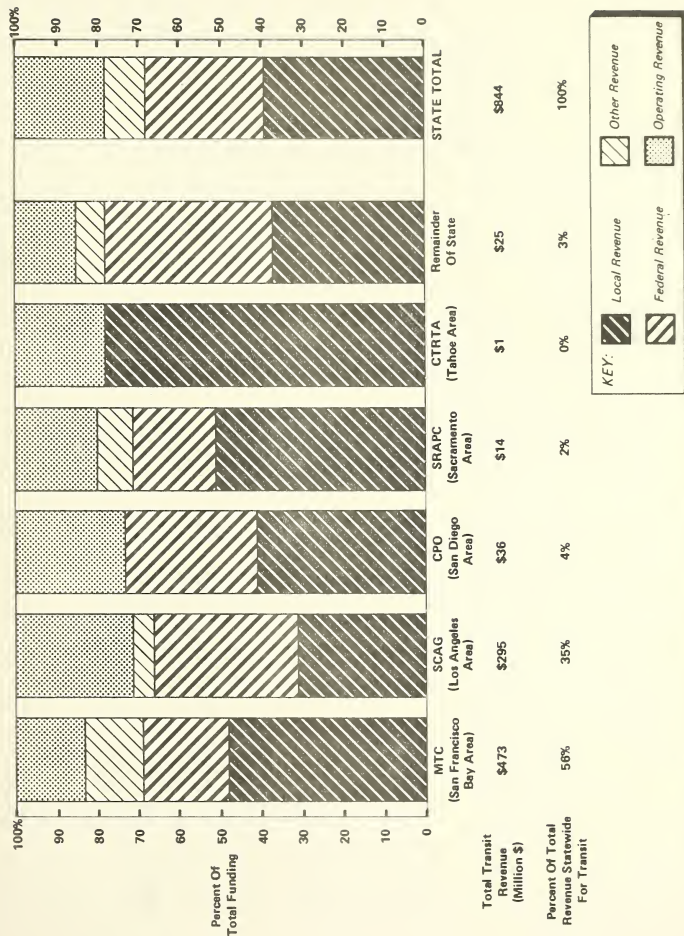
6. Ibid., P. 7-8.

EXHIBIT XIII
Public Policy Project
LOCAL, STATE & FEDERAL PER CAPITA
SUPPORT FOR TRANSIT BY COUNTY*
1975

	PER CAPITA FUNDS FOR TRANSIT			
	LOCAL	STATE	FEDERAL	TOTAL ALL SOURCES
BARTD COUNTIES				
• ALAMEDA	\$57.01	—	\$43.45	\$100.46
• CONTRA COSTA	46.78	—	38.42	85.20
• SAN FRANCISCO	99.69	—	111.50	211.19
OTHER BAY AREA COUNTIES				
• MARIN	8.99	—	51.50	60.49
• NAPA	2.94	—	2.67	5.61
• SAN MATEO	8.71	—	3.04	11.75
• SANTA CLARA	9.81	0.92	6.98	17.71
• SOLANO	3.79	—	5.77	9.56
• SONOMA	5.18	—	26.61	31.79
BAY AREA TOTAL	\$36.59	\$0.23	\$35.85	\$ 72.67

* SOURCE: Metropolitan Transportation Commission, Transportation Finance Task Force,
Revenue Sources For Transit Support, October 15, 1975, Page 4 - 4

TRANSIT REVENUES BY SOURCE COMPARISON
OF CALIFORNIA REGIONAL AREAS
1976/1977*



*SOURCE: Metropolitan Transportation Commission, Transit System Budgets, 1976/1977

EXHIBIT XV
Public Policy Project
TRANSIT OPERATOR DEFICIT PROJECTIONS
FOR 1980-81
(Amounts In Millions)(1)

	AC Transit(2)		AC Transit(3)		Local Buses	San Francisco		BART	Total
	#1	#2	#2	#2		MUNI			
Operating Cost	66.3	5.9	5.9	12.2	12.2	105.7		105.6	295.7
Capital Matching	4.1	0.0	0.0	0.0	0.0	7.6		11.2	22.9
TOTAL COST	70.4	5.9	5.9	12.2	12.2	113.3		116.8	318.6
Operating Revenue	18.3	0.3	0.3	2.4	2.4	25.7		34.7	81.4
Property Taxes	21.8	2.5	2.5	3.7	3.7	49.4(4)		6.7	84.1
Committed Revenue TDA & Section 5	40.1 15.5	2.8 2.1	2.8 2.1	6.1 2.2	6.1 2.2	75.1 16.1		41.4 12.5	165.5 48.4
TOTAL REVENUE	55.6	4.9	4.9	8.3	8.3	91.2		53.9	213.9
PROJECTED DEFICIT	14.8	1.0	1.0	3.9	3.9	22.1		62.9	104.7

(1) SOURCE: Metropolitan Transportation Commission, San Francisco Bay Region Transit Financing Study Summary, January 10, 1977, p. 14

(2) Regular service.

(3) Fremont-Newark service area

(4) Includes Revenue Sharing and Contributed Services.

- . Transit fares have not kept pace with increases in operating expenditures. For example, in the 1970's, AC Transit's fare revenue has decreased from 72% to only 40% of operating expenditures. MUNI's fare contribution has dropped from 58% in 1970 to 36% in 1977. Even more striking is the fact that both AC Transit and MUNI fare revenues covered 94% or more of operating expenditures as recently as 1960. If the present trend continues, fares will produce only 28% of total required revenue by 1980-1981.

In all, the transit financial situation requires some policy changes in the near future to avert the significant projected deficits as well as provide a permanent financing source for BART. Legislation (AB 1107) to achieve that purpose is now being considered by the State Assembly.

2. BART APPEARED TO HAVE LITTLE OR NO IMPACT ON THE ABILITY OF AC TRANSIT AND MUNI TO OBTAIN LOCAL TAX REVENUE OR THE WILLINGNESS OF LOCAL OFFICIALS TO FUND ADDITIONAL TRANSIT SERVICE

The construction and operation of BART resulted in two types of potential impacts on local financing of transit service:

- . The diversion of local property tax revenues to fund BART--The decision to construct BART obligated the citizens of San Francisco, Alameda and Contra Costa Counties to fund \$792 million in bonded debt over a 30 year period. This decision resulted in an additional tax burden of approximately 50¢ per \$100 assessed valuation or about 4% of the total property tax bill in the three BART counties. As late as 1970, property tax revenues applied to AC Transit and MUNI in the three BART counties averaged less than 3% of the total property tax bill, less than the commitment for BART.

BART's projected impact on AC Transit and MUNI operating costs and revenues--The No-BART Alternative Financing Plan, prepared by MTC, calculated expected changes in local transit operator costs and revenues over what would be expected under the No-BART Alternative. These results are summarized for AC Transit and MUNI in Table 4 below. Under the NBA, AC Transit would have had a smaller deficit, although MUNI's deficit would have been considerably larger.

Table 4

BART IMPACT ON THE OPERATING COSTS AND REVENUES
OF LOCAL TRANSIT ¹
FY 1976
(In Thousands Of Current Dollars)

	<u>AC Transit</u>	<u>MUNI</u>
Operating Revenues ²		
(Fares and Interest)	(\$2,350)	(\$2,638)
Operating Expenditures ³	\$1,451	\$7,726
Operating Deficit ⁴	(\$899)	\$5,088

-
1. The BART Impact on regional transit operating costs is the difference between regional transit costs with BART and estimated 1976 costs under the No-BART Alternative.
 2. () indicate losses in revenue with BART.
 3. () indicate increased expenditures with BART.
 4. () indicate increased deficit with BART.

SOURCE: Metropolitan Transportation Commission, "The No-BART Alternative Financing Plan," February 1977, and McDonald & Grefe, Inc., The Economic and Financial Impacts Of BART - Draft Final Report, July 1977, p. 66.

Despite these BART impacts on local funding sources and costs of AC Transit and MUNI, evidence suggests that BART had little or no impact on the ability of these operators to obtain local tax revenue and the willingness of local officials to fund transit. For example:

- . The State has played the major role in restricting local property tax revenues for transit through the passage of Senate Bill 90 in 1972. The bill requires a vote of the people on any city, county or special district measure to increase a local property tax rate above its 1972-73 level. BART, as a separate taxing authority, is controlled separately from other transit operators. Therefore, restrictions on property tax rate decisions by the AC Transit District and the County of San Francisco (for MUNI) would be the same, with or without BART. Further, transit decisions-makers reacted to the State's restriction as a legitimate reason to look to the State rather than local taxpayers for additional revenues.
- . BART property tax decisions were made independently by the BART Board of Directors. Key informants interviewed claimed that MUNI and AC Transit tax rate decisions were based on a variety of factors including service levels, the current tax rate and total tax levy. None referred to the BART tax as an explicit factor. When specifically asked about any role the BART tax might play in their own tax rate decisions, these decision-makers claimed it was beyond their control and, therefore, they were not politically liable.
- . Officials also felt that capital financing was not affected by BART. AC Transit and MUNI bond issues had met voter resistance before BART came on the scene. For example, an original bond issue for AC Transit failed in 1958. A bond issue for Muni equipment failed in 1966, but press accounts and key informant interviews did not identify BART as a reason for the failure. MUNI eventually had to form a Municipal Improvement Corporation to fund necessary capital improvements without requiring a vote of the electorate. This move would most likely have been necessitated with or without BART, although the total capital resources required may have been less without BART and the MUNI Metro.

No public constituency was pressing for major changes in local funding for transit in response to BART. A public opinion survey ⁷ conducted in 1975 suggested that the general public had little understanding of transit finance issues. For example, most respondents believed that increasing transit patronage was sufficient to provide necessary funding for local transit and that transit users should bear the full costs. Only 38% of the respondents were even aware that property taxes were used to fund transit. In a 1976 survey update, knowledge and interest in transit financing issues appeared to have increased. However, survey results do not indicate any agreement on funding sources for transit and the level of local funding acceptable to the electorate.⁸

The following paragraphs provide specific evidence about the decision process and environment affecting tax rate decisions for both AC Transit and MUNI.

(1) AC Transit Local Tax Rate Decisions Appear To Be Made Independent Of BART

The AC Transit District is an independent agency with an elected Board of Directors responsible for taxing and budgetary decisions. Available evidence suggests that BART has not been a consideration in recent tax rate and budgetary decisions made by the Board. For example:

- . AC decision-makers interviewed indicate that budgetary decisions require a balancing of fare and tax rate policy. The greatest concern of the Directors appears to have been the recent significant increases in the total tax levy due to significant increases in assessed valuation. During the rate deliberations in 1977, the Board, for the first time since the imposition of SB90, approved a tax rate less than the maximum allowable. The Board set a rate such that the total tax levy would increase by the rate of inflation. The BART tax was never raised as a concern by these decision-makers.

7. Tyler Research Associates, The Bay Area Transit Finance Public Opinion Survey, (Conducted for the Bay Area Council), August 1975.

8. Tyler Research Associates, Alameda, Contra Costa and San Francisco Counties Transit Finance Public Opinion Survey (Conducted for the Metropolitan Commission), October 1976.

- . When asked whether the implementation of BART-related service changes would affect AC financial policy, the General Manager indicated that financing was not an issue in BART discussions because all routes operated at some deficit.
- . AC Transit decision-makers interviewed view the State's imposition of SB90 as a constraint in raising further local revenue and are using that restriction as a basis for approaching the State rather than local taxpayers for further revenues. Again, the BART tax burden has not been explicitly raised as an issue with the State.

(2) Perceptions Of MUNI's Own Inadequacies, Not BART, Were The Primary Factors In MUNI Financing Decisions

MUNI was established as a public utility under the 1932 City and County charter. As long as MUNI was a net revenue generating operation, it enjoyed a status relatively independent of City decision-making processes. As MUNI became a deficit operation, and as those deficits continued to increase dramatically, MUNI came under greater scrutiny by City decision-makers in the annual budgetary process. Today, MUNI competes with all other City/County departments for local property tax revenues. Over the past ten years, MUNI's share of the City's property tax revenues has increased from 10% to 20%. Although the provision of BART feeder service did increase the need for local funding, BART did not appear to be a factor in MUNI budgetary or tax rate decisions. The evidence includes:

- . The Board of Supervisors and the Mayor have consistently cut MUNI's budget in the past few years. Press coverage of recent budget decisions emphasized the Board's reference to MUNI's "poor management," "inefficient operations," "discourteous drivers," etc., but never mentioned BART as a concern.
- . MUNI decision-makers interviewed indicate they occasionally use BART as an example in budget hearings, referring to the large number of administrative staff and salaries compared with MUNI. However, these same decision-makers claim the

Board of Supervisors is only interested in the MUNI "bottom line" and not what component of total costs are BART-related or how MUNI and its staff compare with BART.

- . MUNI has had no effective public constituency concerned about the financing of transit in San Francisco. Citizen groups are only active to oppose any proposed service reduction or fare increase. Only recently a MUNI Coalition was formed, generally representing senior citizens and low income residents. This group has lobbied for greater maintenance funding, but has not used BART in any of its arguments.
- . Two groups, the San Francisco Planning and Urban Research Association (SPUR) and the Greater San Francisco Chamber of Commerce have actively lobbied for improvements in MUNI management and operations and increased funding. Reports and public statements of these groups focus on MUNI's problems and contain no significant references to BART and its impact on MUNI.

3. STATE AND REGIONAL FUNDING FOR BART COUNTY TRANSIT OPERATORS (EXCLUDING BART) IS LOWER THAN WHAT WOULD HAVE BEEN EXPECTED UNDER THE NO-BART ALTERNATIVE

State and regional funding for transit in the Bay Area has expanded dramatically over the past decade. This increase in funding generally followed the model set by the Federal government of increased emphasis on a multi-modal approach to transportation and a corresponding shift in funding toward transit systems from highways.

BART's impact on these changes in funding levels for transit operators was assessed in two areas:

- . Was BART the cause for the creation of new sources of State and regional funds for other transit operators?
- . Did BART use State and regional funds which would have been available for other transit operators in BART's absence?

Overall, study findings suggest that BART caused a reduction in State and regional funding to other local transit operators over what would have been available under the No-BART Alternative. First, new State and regional funding sources, although created in part to help BART, would have most likely been available in the absence of BART. BART's impact, at best, was to increase the need for State and regional funding, and to speed up legislative approval of such funding. Second, an examination of funding allocation procedures suggests that more State and regional funds (including Federal funds from UMTA Section 5 allocated regionally) would have been available to other operators without BART.

This section presents an analysis of BART's impact on the origin and the actual allocation of each of the major new sources of State and regional funding for Bay Area transit.

(1) BART Had Little Or No Impact On The 1974 Passage Or Implementation Of A Proposal To Divert Some State Highway Funding For Transit

The use of State highway funds for transit was originally forbidden by the State constitution. The State voters approved Proposition 5 in 1974, changing the State constitution to allow a small amount of the State's highway fund to be diverted for capital expenditures for fixed rail guideways at local option.

The diversion of highway funds for transit was considered as a funding option throughout BART's development. As early as 1963, the State Legislature considered a proposal similar to that which was finally approved, as a way to reduce the local tax burden of BART construction.⁹ The issue was again debated in the 1967-69 period when BART experienced a \$150 million deficit in capital funding. Twice, measures were put before the voters before the concept was approved.

Newspaper accounts throughout the period suggest the most vocal and expensive opposition was from the well developed highway lobby including major oil companies, the California State Automobile Association and legislators from non-urban districts. BART was not used as an argument in the proposition debate, but use of available funds for BART extensions was suggested as a possible result.

The approval of Proposition 5 would primarily benefit the Los Angeles and San Diego urban areas which were both in the initial planning stages for rapid transit.¹⁰ Proposition

⁹Oakland Tribune, "Use of Gas Tax for Rapid Transit Hit," January 23, 1963.

¹⁰Senator James Mills of San Diego was the original sponsor of Proposition 5.

5 limited use of highway funds to capital expenditures for fixed rail guideways. With the basic BART system completed, the District could only qualify for funds for rail extensions which were not viewed as likely in the near future.

In all, BART appeared to be the cause for early proposals to divert highway funds to transit, but did not appear to play an important role in the final approval of Proposition 5. BART has not qualified for use of Proposition 5 funds; therefore BART has not diverted available funding from other transit operators.

(2) BART Was The Cause For The Initial Authorization Of Local Sales Tax Funds For Transit, But Precedent Exists For The Availability Of Such Funding In The Absence Of BART

BART was the first transit district in the State to receive authorization to increase the local sales tax by ½¢ to finance public transit. The original BART legislation, approved in 1969, was the result of a three year heated debate as to how the State could provide the \$150 million shortfall needed by BART to complete its basic system construction.

The urgency of the situation and the character of the debate represented the development of policy by process of elimination. At that time, the use of the sales tax to fund rapid transit was the only proposal that could gain the support of both houses of the State Legislature and then Governor Reagan.¹¹

When the Legislature approved a temporary extension of the ½¢ sales tax for operating expenditures in 1974, it also mandated both the Legislative Analyst and MTC to develop a long term financing solution for BART. The plans proposed by both the Legislative Analyst and MTC were similar in concept and substance. Both looked farther than just the BART deficits (up to now the only concern of the Legislature) to transit financing for all systems in the three BART counties. Both recognized that BART's financial situation could not be resolved without also considering the increasing unfunded deficits of AC Transit and MUNI, the major systems within the three county regional area. (Transit systems in the rest of the Bay Area projected adequate resources through 1981.)

¹¹Based on public statements by legislators and the Governor. This result is also supported in McDonald & Smart, Inc., A History of the Key Decisions in the Development of Bay Area Rapid Transit, August 1975, pp. 65-66.

The result of these plans was AB 1107, sponsored by Assembly Speaker Leo McCarthy, currently under debate in Sacramento. The proposed legislation, if passed, will provide a permanent base of funding for BART operations (75% of the local ½¢ sales tax revenue) and discretionary funding for all three local operators--AC Transit, BART and MUNI--to be allocated by MTC for new services.

Both MUNI and AC Transit viewed the BART debate as an opportunity to obtain a new source of revenue from the State. AC Transit described its need for additional funds to cover expected deficits and appealed to the State Legislature for assistance. MUNI has also supported a "me too" approach to the Legislature during BART debate.¹²

Since the initial approval of use of sales tax funds for transit (specifically BART), four other California counties have received similar legislative approval. Implementation is subject to a local referendum, which has been approved only in San Mateo County. Legislative staff interviewed generally agreed that BART most likely did not set a precedent for later funding. Temporary sales tax funding for the Southern California Rapid Transit District was considered and approved during the same legislative session on BART's tax proposal. Further, passage of a funding proposal for a specific region appears to depend more on the agreement and support of legislators from that region than the existence of that type of plan in any other region. Therefore it is likely that the BART counties could have eventually obtained similar authorization without BART if Bay Area legislators were convinced of a funding need.

Although the final outcome of the current legislation is yet to be determined, passage of the current sales tax proposal is likely. Local transit operators will have a new source of discretionary funding for transit, although they probably could have eventually obtained similar funding in the absence of BART.

(3) BART Was Not An Apparent Cause For The Approval Of TDA Funding, But Most Likely Diverted Available Funding From Other Transit Operators In The BART Counties

The Transportation Development ACT (TDA-SB325 or Mills-Alquist-Deddeh Act) was approved in 1971 to provide a new source of local funding for transit. The resulting

¹²AC Transit requests for State funding described in a press release dated March 11, 1976, and a letter from the AC Transit Board of Directors to the Chairman of MTC dated March 4, 1976.

act is a complicated piece of legislation, due largely to the wide variety of different interests it was designed to please. Major provisions include:

- . One-quarter cent of the existing state sales tax was earmarked for transportation.
- . The sales tax was extended to include gasoline. (These two provisions combined results in no net change in State revenue.)
- . Sales tax funds were returned to the county of origin and could be allocated to projects and sources based on local priorities (transit first, streets and highways last).
- . The original bill required 75% of funds be used for capital; that requirement has recently been relaxed to 15%.

The Legislature's involvement in statewide transit financing was initiated by the Southern California Rapid Transit District (SCRTD) through Assemblyman Wadie P. Deddeh (San Diego).¹³ The SCRTD has been continually unable to gain any local property tax support, unlike San Francisco Bay Area transit operators. In 1969, the Legislature approved a six month sales tax proposal ($\frac{1}{2}\%$) as a "bail out" for SCRTD operations.¹⁴ By 1971, the financial condition of SCRTD was critical and further State assistance was needed.

Given the more permanent nature of the SCRTD need, the Legislature took a more comprehensive view. The choice of essentially a local tax, although State-administered, was viewed as necessary for approval. Any authorization of State funds would require an appropriation measure requiring a two-thirds majority of the Legislature. An authorization of local funds, as resulted, required only a majority vote.

BART was specifically excluded from receiving TDA funds in the original act. The legislation could have but did nothing to alter the "maintenance of effort" provision in BART's sales tax legislation requiring a corresponding reduction in sales tax revenues if any other new

¹³Interviews with past and present staff of Assembly Transportation Committee. Also Oakland Tribune, "BART Finances Irk Lawmakers," April 18, 1971.

¹⁴This legislation approval directly followed the original BART sales tax legislation. However, no key informants could link the two pieces of legislation in any causal way.

sources were made available to BART. Privately, SCRTD officials made it known that they wrote BART out because they feared its inclusions would kill the legislation.¹⁵

Regardless, BART still submitted an \$8.7 million application to MTC for TDA funding.¹⁶ BART requested funds for additional rolling stock, feeder bus service and construction of Oakland headquarters building. The Legislature effectively deferred the decision to MTC, not wanting to get involved in a conflict among local operators.¹⁷

MTC developed an arbitrary allocation formula for the three BART counties based on estimated percent of transit patronage for each operator.¹⁸ This formula allotted about 25% of each county's fund, or a total of \$6.2 million in 1975-76, to BART. Without BART, and assuming no new transit operators would emerge in the BART counties, MTC's only available option was the allocation of all San Francisco funds to MUNI (an additional \$2.0 million in 1974-75) and all Contra Costa and Alameda County funds to AC Transit (an additional \$3.0 million for basic service and \$1.2 million for new service in now unserved areas in 1974-75).¹⁹

In all, BART had little to do with the conception of TDA financing for local transit. However, BART's application for TDA funds was viewed by most key informants as the first public admission by the District that fare revenues would not be able to support operating expenditures and additional capital projects once expected to be funded through fare revenues. In addition, BART most likely diverted TDA funds which, in BART's absence, would have been available for other transit operators (AC Transit and MUNI) within the three county district.

¹⁵Oakland Tribune, "BART Finances Irk Lawmakers," April 18, 1971.

¹⁶The Legislature gave MTC responsibility for TDA fund allocation and monitoring for the nine county San Francisco Bay Area.

¹⁷Oakland Tribune, "BART Won't Benefit From New Sales Tax On Gasoline," August 13, 1972.

¹⁸Actual sales tax revenues were returned to the county of origin for allocation by MTC for transit-related projects and services.

¹⁹Metropolitan Transportation Commission (BART Impact Program), The No-BART Alternative Financing Plan, February 1977, pp. 5-6.

(4) BART Was An Argument, But Not A Primary Factor In The State Legislature's Decision To Allow Toll Bridge Revenue To Be Used For Transit

The diversion of bridge tolls for transit had been a long-standing issue before the State Legislature. The originally proposed BART system included a subaqueous tube crossing the San Francisco Bay which was funded by \$180 million in toll revenues from the San Francisco Bay Bridge. Diversion of toll bridge revenues to fund the completion of the BART system was again proposed in 1969 and was not approved primarily because of then Governor Reagan's threatened veto, not lack of support by the Legislature.²⁰ In the next three years, BART inquiries for toll revenue support for BART operating expenditures met resistance in the Legislature, more because of general resistance to another BART funding request rather than the concept of tolls as a specific transit revenue source.²¹

The legislative history of AB 664 suggests little specific relationship to BART in the design or approval of the act.²² A key architect of the bill (member of Assemblyman Foran's staff) indicated the legislation was conceived by Foran as a unique opportunity to regulate traffic congestion and use funds for local transit generally. The purpose of the bill, as expressed in the legislative language, is to "further the development of public transportation systems in the vicinity of toll bridges in order to alleviate automobile related congestion and pollution, and to diminish the need for State expenditures on new bridge facilities ..."²³

²⁰San Francisco Chronicle, "BART Endorses Sales Tax Increase," November 28, 1968.

²¹San Francisco Chronicle, "Resistance to BART on Toll Funds," May 5, 1973.

²²AB 664, sponsored by John Foran and approved by the Legislature in 1975, transferred authority for setting tolls on Bay Area bridges from the California Toll Bridge Authority to MTC. Revenues in excess of toll bridge operating and debt-service cost would be available to fund transit projects in the vicinity of the bridges.

²³Metropolitan Transportation Commission, "Employing MTC's Authority Under AB 664- Bridge Tolls As A Transit Revenue Source," Background Paper, San Francisco Bay Region Transit Financing Study, December 1976, p. 12.

Although BART may have been in the back of Assemblyman Foran's mind in proposing AB 664 (he was a strong BART supporter), BART was never an explicit argument in favor of the proposal. In fact, some opponents tried to label the bill a "BART bail-out" bill to cast doubts on its worthiness.

MTC used its toll setting authority for the first time in 1977 to raise tolls on three Bay Area bridges. The final amount of the increase was compromised in light of heated opposition from bridge users and highway groups. In part, additional capacity provided by BART across the San Francisco Bay gave MTC a better rationale for its increase than if the corridor was limited to AC Transit service without BART. Further, the availability of bridge toll revenues for BART capital projects will allow the release of TDA and Federal Section 5 funds for other operators.

Overall, BART set a precedent for the use of bridge tolls for transit, but appeared to have little impact on the Legislature's decision to allow MTC to regulate Bay Area toll revenue for transit assistance. It remains too early to predict whether toll bridge funds will be used for BART capital expenditures and whether that might mean any change in funding for other operators under the No-BART Alternative.

(5) Federal Section 5 Operating Subsidies To BART Would Have Been Available To Other Transit Operators Under The No-BART Alternative

Federal Section 5 subsidies are allocated to regional areas based on a formula taking into account population level and density. In 1975-76, BART was awarded \$100,000 in Section 5 funds which would be available to AC Transit and MUNI under the No-BART alternative (the estimated allocation formula was 40% to MUNI and 60% to AC Transit). However, as BART's eligibility for this source of funding was later confirmed, BART's share rose dramatically to a current level of \$3.5 million in 1977-78. Although other operators would theoretically be able to share this amount under the No-BART Alternative, a maintenance of effort clause in Section 5 legislation makes a substantial increase to AC Transit and MUNI difficult. That is, to accept additional Section 5 funds, neither operator could reduce the current level of local tax support. Practically, neither operator can currently accept more than the present amount of Section 5 funding to meet operating deficits.

4. THE MOST DRAMATIC IMPACT OF BART HAS BEEN CHANGES IN STATE AND REGIONAL POLICIES FOR TRANSIT FINANCING IN THE BAY AREA

Although BART has had some impact on the level of revenues available to local transit systems in the BART counties, BART's more significant impact was a catalyst for the development of State and regional policies for transit financing which did not exist before BART.

As suggested by the Bay Area Council in its 1975 report on financing Bay Area transit:

"There exists little precedent from which to evolve a truly comprehensive regional transit finance policy framework. Federal guidelines are lacking, and the State's participation in financing of transit has been minimal ... Thus far, no policies have been established to guide the evolution and coordination of proposals to broaden the region's long-term transit financial resources and capabilities. Neither are there regional policies directed toward more effective utilization of currently authorized funding, through transit operating efficiency measures, coordination of transit resources and critical evaluation of transit needs."²⁴

It was into this policy setting that BART appeared to, in effect, compete for scarce resources with other local transit operators. It was clearly BART, its financial crises in the late 1960's and the financing strain it created in the three county BART District that together created sufficient pressure for a reassessment and current effort aimed at achieving more comprehensive regional and State policies for transit finance.

A description of BART-related policy changes is presented in the following sections.

(1) The BART Financial Crisis Led To The Initiation Of A Number Of Comprehensive Studies Of Transit Financing Policies

The eventual realization that BART could not be expected to meet its operating expenditures through fare revenues (about 1973) was a direct cause for the initiation of several policy studies on transit finance.

²⁴ Bay Area Council, Financing Bay Area Transit--Policy Study And Recommendations, September 1975, pp. 11, 22.

- . MTC--conducted two policy studies on transit finance using a Transportation Finance Task Force (TFTF).
 - MTC conducted its own general study of available transit revenue sources in 1975.
 - The State Legislature required MTC to conduct an analysis to develop a long term financing approach for BART. Final results were presented to the Legislature in January 1977.
- . State Legislative Analyst--was requested by the Legislature to conduct an analysis to develop a long term financing plan for BART (simultaneously with the MTC study). The Analyst presented initial findings in 1975 with an update in 1977.
- . Bay Area Council (a private, non-profit regional organization)--initiated a comprehensive study in 1975 to address the need for coordinated region-wide efforts to improve the financial status of publicly financed transit in the Bay Area. BART's financial crisis was viewed by Council staff members as an important motivation for the study.

All of these studies dealt with a region-wide approach to transit financing. The final reports contained minor differences on particular policies, but generally agreed in their recommendations for a comprehensive transit finance policy. The results led to the proposal of new State legislation (AB 1107) currently under consideration which will mandate significant changes in transit finance policy as described in subsequent paragraphs.

(2) Current State Legislation In Response To BART Financial Difficulties Will Establish New State Policy Guidelines For Transit Financing In The Bay Area

The State of California has maintained some form of local policy control in recent State transit financing legislation.²⁵ Although the general character of the

²⁵For example, TDA fund allocation is delegated to the regional level, sales tax appropriations for local transit must be approved by a local plebescite (except in the BART counties), local governments must apply for consideration of Proposition 5 funding, etc.

* current AB 1107 affirms this policy (the Legislature authorizes MTC to implement the legislation), the legislation establishes a broad set of State policy guidelines to be applied at the local level. These policy guidelines for transit financing are as follows:

- . Transit operators should strive to control operating cost increases, particularly labor costs. The Consumer Price Index (CPI) should be used as a standard for acceptable cost increase limits.
- . Operators should maintain fares at a level to cover a constant portion of operating costs (guideline now set at 33%).
- . Local revenue contribution to transit should be maintained at a constant level based on the current contribution (this "maintenance of effort" concept is used by the Federal government for UMTA Section 5 subsidies).
- . Increments to existing transit service should only follow fiscal stability and then be decided based on regional priorities within existing regional funding resources.
- . BART should be provided a continuing revenue foundation, similar to the property tax base of AC Transit and MUNI.

This aggressive policy stance by the Legislature appears to actually be a result of its desire not to be involved in transit finance policy. The Legislature became increasingly uncomfortable that the BART financing problem would always have to be settled on a State rather than regional basis, attracting attention and often controversy to the State level.²⁶ This latest policy stand is an attempt to finally and completely return much decision-making on the transit financing issue to the regional level.

²⁶Statement by legislative committee staff members.

(3) Recent Action By The State And MTC In Response To BART Has Strengthened MTC's Regional Role In Transit Finance Policy

The State Legislature's dismay at being continually involved in the BART financing controversy has led it to provide MTC substantial regional authority for transit financing and to increase pressure on MTC to take a more aggressive role in regional financing decisions than in the past.²⁷ Although the Legislature has authorized some form of regional transportation agency for the San Diego and Los Angeles metropolitan areas, neither has been given the level of transit financing policy authority or continued scrutiny that MTC has received.

In part due to legislative and regional pressure,²⁸ MTC has recently initiated policy and organizational changes designed to increase its role in regional transit financing decisions. For example:

- . MTC appears to be moving away from the existing concept of strict formulas for the allocation of discretionary funds. As transit funds become an increasingly scarce resource, MTC can exercise greater control by using funds as leverage for achieving regional transit financing objectives, particularly those outlined by the State Legislature in AB 1107.
- . MTC successfully used its authority for setting bridge tolls for the first time in 1977 amid great controversy. The willingness to use this source was a result of regional transit finance policy as expressed in MTC's Transit Finance Study recommendations of January 1977. As indicated earlier, BART's financial situation was a primary cause for the study.

In all, the role of MTC in transit financing decisions is evolving from a passive to a more active role. This change in regional policy can be traced in part to BART financing controversies.

²⁷The Legislature has mandated a review of MTC's effectiveness by the Legislative Analyst as part of its legislation for permanent BART financing (AB 1107).

²⁸The Bay Area Council has been an active proponent of a more aggressive role for MTC.

VII. CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to assess the public policy impacts of BART on the provision of existing and new local transit service and transit financing. This chapter includes general study conclusions as well as specific conclusions in each of the policy areas studied. These conclusions are followed by a discussion of potential transferability of study findings and public policy implications.

The construction and development of BART added significant additional transit capacity in three counties in the Bay Area. The definition of the No-BART Alternative (assuming no major capital investment and only minor changes in existing transit services) suggests that the additional BART capacity often duplicates existing services provided by other modes, although not at the same level. Results of this study indicate that transit operators or local governments within the three county BART District chose to maintain roughly their pre-BART level of transit service by opposing the elimination or reduction of services or routes paralleling BART. In addition, some communities and operators added new services partially to feed BART.

Only after BART began operations, did it become evident that the local tax burden for transit was expanding beyond existing resources and had actually become the highest in the nation. Some additional funding sources were added (permanent sales tax, toll bridge revenues, etc.), but financial projections still show some shortfall and the provision of additional revenues appears to be politically infeasible. Therefore, the State and the Metropolitan Transportation Commission initiated significant changes in transit finance policy to better address issues of efficiency, cost effectiveness and fare revenue contribution on a three county basis. These changes would, hopefully, allow transit in the three county area to live within existing funding resources.

The following three sections present specific study conclusions.

1. BART WAS THE CAUSE FOR DEVELOPMENT OF INTER-OPERATOR TRANSFER POLICIES, BUT HAD RELATIVELY LITTLE IMPACT ON SERVICE AND FARE POLICIES OF EXISTING TRANSIT OPERATORS IN THE BART COUNTIES. THE IMPACT ON WAGE AND PERSONNEL POLICIES IS UNCERTAIN

Literature on policy policy and transit policy suggested that responses of existing transit operators to BART would include only gradual and incremental changes of a compromise nature rather than comprehensive plans.

BART system planners recognized the importance of coordination between BART and existing operators to form a comprehensive transit network. A major Federally funded demonstration project was conducted prior to BART's opening which developed a detailed plan for transit operator coordination. Despite the existence of this plan, few changes in service and personnel policy were implemented, although interim transfer systems were developed. Specific types of policy change or lack of change include:

- Service policy--Although proposed route changes to provide feeder service to BART were generally implemented, proposed reductions in routes or service levels paralleling BART were generally not implemented. Reasons for this outcome include:
 - Public pressure to maintain existing routes and levels of service, with no general public, press or outside interest group constituency favoring coordination.
 - Operators viewed the projections and corresponding recommendations of comprehensive studies with some skepticism and were reluctant to implement changes on that basis alone. Operators also differed markedly from BART on the definition of optimum routing policy.
 - At least one operator lacked adequate staff resources to develop or respond to proposed transit route and service plans.
 - The coordination process did not provide an effective forum for negotiation.
- Fare and Transfer--BART had little impact on operators' fare policy. (Operators agreed to maintain independent fare structures). However, BART did reach agreement with both operators (AC Transit and MUNI) on interim transfer systems prior to the opening of BART. Reasons for fare policy outcomes are similar to those referenced under service policy above. However, BART did result in a change in transfer

policy because transit managers viewed transfer policy as more dependent on other operators (due to issues of cost sharing, equipment purchase, etc.) compared with service policy which was viewed as an independent decision.

- . Wage and Fringe Benefit Policy--A historical comparison of BART, AC Transit and MUNI wages and fringe benefits showed no noticeable impacts of BART policies on general trends in wages and fringe benefits of AC Transit and MUNI. The impact of BART on a year-to-year basis is uncertain. However, managers at both AC Transit and MUNI acknowledge that BART wages are often used as a standard for comparison in collective bargaining negotiations.

2. PLANS FOR OR THE PRESENCE OF BART WERE NOT SUFFICIENT FOR THE CREATION OF EITHER FEEDER OR LOCAL TRANSIT SERVICE

Past experience in planning rapid rail transit systems suggests that feeder service is seldom an early concern in system development. However, BART planners did push for comprehensive planning of transit system coordination. Despite early planning, BART planners were pessimistic about the ability of buses to compete effectively with automobiles in outlying areas for to/from BART trips.

For the two new transit proposals considered in this analysis, BART was at most one cause for beginning study of a new transit system in Contra Costa County but not in the Tri-City case. However, in neither area did BART as a system or as an organization play a major role in determining the outcome of the eventual public vote on transit proposals. BART was viewed as a tie-in point and an important link to obtaining Federal and State funding. However, actual system development near BART appears more related to State and Federal subsidies than BART. Other secondary reasons for the development or frustration of local transit include:

- . The nature of local rather than feeder transit service, including its routing, costs and practicality. Concerns include service to ward or away from business areas and service for the elderly, young and handicapped.

- . The availability of information to the public on the proposed new transit service. In both case studies, dial-a-ride was central to the proposals. Positive or neutral press coverage and debate characterized the successful vote for transit in one case; visible, negative information and discussion characterized the debate in the unsuccessful case.
- . The position and resources of actors and interests such as public officials, Chamber of Commerce, and ecology or elderly interests. In the case of voter approval, all these interests were in support with no opposition; in the case of voter disapproval, there were divisions among decision-makers, general or weak support from certain interests and much opposition from other interests.

3. BART WAS A PRIMARY CAUSE FOR THE AVAILABILITY OF FEWER FINANCIAL RESOURCES FOR OTHER BART COUNTY TRANSIT OPERATORS AND NOTICEABLE CHANGES IN STATE AND REGIONAL TRANSIT POLICY

BART was originally expected to fund all operations and some capital expenditures through fare revenues. Because this expectation could not be met, BART caused additional local financial resources to be raised for transit expenditures. Specific impacts on transit funding included:

- . Despite the additional local tax burden of BART construction and later operations, BART appeared to have little impact on the willingness of local public officials to fund local transit service other than BART.
- . BART caused a reduction in State and regional funding to other local transit operators over what would most likely have been available under the No-BART Alternative. BART's financial deficits forced State officials to create new sources of revenue for transit finance in the BART District Counties. However, these new sources could well have been available to other BART county operators eventually even in the absence of BART. In addition, local transit operators would have been eligible for additional funds in BART's absence which are now allocated to BART.

Public policy literature suggests that the State and the Metropolitan Transportation Commission would not make dramatic changes in transit financing policy without a major crisis or problem in existing financial arrangements. BART's financial problems, stemming from construction deficits of about \$150 million and the need for a permanent source of operating funding, presented just such a major crisis. The State Legislature has initiated significant changes in State policy and mandated changes in regional policy for transit finance. Specific changes included:

- . The initiation of major transit finance policy studies addressing problems just in the three BART counties.
- . The establishment of special State policy guidelines only for the three BART counties.
- . The strengthening of MTC's role in monitoring the efficiency of all BART county transit operators.

4. THE TRANSFERABILITY OF STUDY FINDINGS DEPENDS ON TRANSIT ORGANIZATIONAL ARRANGEMENTS, TYPE OF SERVICE AND FUNDING SOURCES

Study findings and conclusions were developed on the impact of BART on transit service and financing based primarily on characteristics of the transit policy environment in the Bay Area. These findings, conclusions and finally implications will be relevant to other areas only when elements of the transit environment exhibit characteristics similar to those in the BART counties. Areas requiring some qualifications in transferring study findings include:

- . Organizational Arrangement--BART was formed as a regional transit agency in the midst of a variety of existing public and private transit operators. No regional authority (until MTC was formed in 1970) was available to mediate joint coordination efforts or impose regional cost effectiveness criteria on BART development. Regions with a single regional transit operator may be able to make individual service level/cost trade-offs that operators in the BART counties were not able to do. The existence, during initial system planning, of a regional planning and preferably funding authority over local operators would provide a forum for bargaining

and compromise. This arrangement may lead to better coordination from a broad cost benefit point of view.

- . Type of Existing Service--The BART system was designed in the midst of a number of existing transit routes, some of which paralleled proposed BART lines. In this environment, the provision of feeder service was not viewed as BART's responsibility, but that of existing or new bus operators. The transferability of study findings to other areas depends on the level of parallel service proposed (as a means for defining potential competition for the rapid transit system) and the availability of existing bus services in the vicinity of proposed feeder service requirements (suggesting the level of forward planning and coordination required to assure adequate feeder service).
- . Type of System Financing--BART construction and operations were funded largely through local sources. Further, the State of California has assumed only a minimal role in transit funding and only a slightly larger role in transit finance policy. More authority for transit funding decisions at either the State or regional level would substantially alter the character of transit policy and the decision-making process.

5. STUDY FINDINGS SUGGEST A VARIETY OF POLICY IMPLICATIONS RELEVANT TO THE BAY AREA AND TO OTHER METROPOLITAN AREAS CONSIDERING RAPID TRANSIT

The BART experience suggests a number of implications for the planning and implementation of a rapid transit system in a policy environment similar to BART's.

- . Transit Organizational Structure--A loose confederation of local and regional transit operators with potentially competing services will have little incentive to agree to a regional cost effective approach to providing regional transit service. A single regional transit authority probably provides the best incentives for service coordination. A regional planning and funding agency, with

sufficient decision-making authority and funding leverage could certainly enhance prospects of system coordination. The former arrangement is not politically feasible in the Bay Area (due to legislative and San Francisco City Charter constraints which are difficult to change and the fact that City officials would be unwilling to give up control over MUNI operations for political reasons). MTC now has sufficient funding authority to alter the degree of coordination in the future. However, before exerting such influence, MTC needs to develop convincing cost/benefit rationale for optimum coordination. To date, no coordination studies have done this satisfactorily.

- . Transit System Design--Initial rapid transit system planning should include an analysis of coordination issues which may affect system design. Some very basic design issues apparently neglected in BART planning are:
 - Station location decision should consider the availability of existing local transit as possible feeder lines.
 - The purchase of fare collection equipment should consider the flexibility of the equipment for implementing transfer systems.
- . Transit System Financing--Any new rapid transit system cannot be expected to support its operations through fare revenues alone. Therefore, system planning should include projections of public funding requirements based on the latest experience with systems like that being planned. If the rapid transit system is to compete with existing transit operators for funding, an effective regional or State authority should have responsibility for allocating available funds to various operators based on regional and/or State transit objectives. The Federal government should rely on the same regional and State authority to recommend trade-offs for transit capital funding.

. Transit Service Policy Coordination--The BART experience shows comprehensive route and schedule planning is not sufficient to alter the service policies of existing transit systems. Planning studies must go beyond study to examining incentives for implementation if any results are to be expected. Attention should be given to criteria such as the most cost effective mode for a given corridor, means to encourage efficient service levels within specific corridors and ways to protect or compensate transit agencies during coordination experiments. Because subsidies appear more likely than BART to encourage feeder service, planning studies should give deliberate attention to alternative subsidy mechanisms. Where it is desirable to minimize subsidy levels, attention should be given to:

- No feeder service, but parking and kiss/ride options.
- Private services under contract to provide local and feeder service.

Both may be more cost effective than public dial-a-ride, fixed route combinations debated in the BART counties.

. State/Regional Role In Transit Coordination
--Coordination among a variety of potentially competing transit operators, as in the Bay Area, can only effectively be handled at least at the regional, if not the state level. The incorporation of regional trade-offs on service levels and financing appears to be the most practical way to avoid duplications in service and to encourage a cost effective system. The State or region has authority which would allow broad policy changes--for example achieving some parity in fare revenue contributions by tying discretionary funds to fare contribution requirements. Areas where state and regional policy could play an important role include:

- System planning, specifically capital improvement projects and service levels.

- Cost effective and efficient operations, through monitoring and funding leverage.
- Funding requirements and allocations of discretionary funds.

. Federal Government Role In Transit System Coordination--Systems developed since the late 1960's (unlike BART) benefit from substantial Federal funding contributions for construction and operations. The Federal government might better ensure the cost effectiveness of its investment by allocating a certain amount of planning and demonstration funding to provide incentives for transit system coordination. Programs could be designed to provide incentives to transit operators to implement route and schedule changes on a trial basis during the initial phase of rapid transit operations. Such a procedure would help minimize the uncertainty of the new system and verify any questionable projections of system patronage. Uncertainty about such projections was a major stumbling block to negotiations between BART and existing operators during coordination studies.

APPENDIX A
KEY INFORMANT INTERVIEW LIST
(titles as of September, 1977)

STATE LEGISLATURE

- . Arthur Bauer--Office of Senate Research
- . Robert Lucas--Consultant, Assembly Transportation Committee
- . Robert McCleary--Legislative Analyst
- . Bruce Samuels--Assistant to the President Pro Tempore of the Senate (Senator Mills)
- . Thomas Sweetman--Assembly Ways and Means Committee

METROPOLITAN TRANSPORTATION COMMISSION

- . Paul Bay--Deputy Director for Planning and Environmental Analysis
- . Nat Gage--Deputy Director for Planning and Implementation
- . Don Morgan--Former Assistant Project Manager, AC/BART Coordination Project.
- . Walter Stoll--Program Manager, Planning and Implementation

BART

- . Ray Ceder--Planner
- . Howard Goode--Chief of Planning Program Section
- . William Hein--Director of Planning
- . Harry Lange--Former member, Board of Directors
- . Robert Rausch--Operations Analyst
- . Al Wolf--Past Director, Northern California Transportation Demonstration Project.

AC TRANSIT

- . Alan Bingham--General Manager
- . Sam Davis--formerly AC Transit Planning and Director, Northern California Transportation Demonstration Project

AC TRANSIT (Continued)

- . Donald Larson--Planning Director
- . Robert Nisbet--General Counsel
- . Warren Robinson--Transportation Engineer
- . Robert Shamoon--Personnel Manager

SAN FRANCISCO MUNICIPAL RAILWAY

- . Gerald Cauthen--Transit Improvement Program
- . Curtis Green--General Manager
- . John Madden--Chief Accountant
- . Tom Matoff--Transit Planner

SAN FRANCISCO CITY AND COUNTY

- . Alan Lubliner--Transportation Planning, Department of City Planning

TRI-CITY (FREMONT-NEWARK-UNION CITY)

- . Tom Debly--Fremont Argus
- . Donald Driggs--Fremont City Manager
- . Doug Eads--City of Fremont Administrative Assistant
- . Arthur Lampert--Fremont City Council
- . Richard Oliver--Union City Council

CONTRA COSTA COUNTY

- . James Cowdren--Executive Vice-President, Contra Costa County Taxpayers Association
- . Leonard Grote--Pleasant Hill City Council
- . Pat Keeble--Bureau Chief, Contra Costa County News Service

CONTRA COSTA COUNTY (Continued)

- . Paul Kilkenny--Assistant Public Works Director, Contra Costa County
- . Elwin Lance--Martinez City Council
- . Richard LaPointe--Concord City Council

OTHER

- . Jack Bourne--Director, Mission Housing Development Corporation
- . John Jacobs--Executive Director, San Francisco Planning and Urban Research Association
- . Gregory Moore--Associate Director, Bay Area Council
- . Brigitte Straubs--Staff Associate and Editor, Bay Area Council

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